TravelMate 5720/5320 Series Extensa 5620/5220 Series Service Guide

Service guide files and updates are available on the ACER/CSD web; for more information, please refer to http://csd.acer.com.tw

PRINTED IN TAIWAN

Revision History

Please refer to the table below for the updates made on TravelMate 5720/5320 and Extensa 5620/5220 Series service guide.

Date	Chapter	Updates

Copyright

Copyright © 2007 by Acer Incorporated. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of Acer Incorporated.

Disclaimer

The information in this guide is subject to change without notice.

Acer Incorporated makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties of merchantability or fitness for any particular purpose. Any Acer Incorporated software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not Acer Incorporated, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software.

Acer is a registered trademark of Acer Corporation.

Intel is a registered trademark of Intel Corporation.

Pentium and Pentium II/III are trademarks of Intel Corporation.

Other brand and product names are trademarks and/or registered trademarks of their respective holders.

Conventions

The following conventions are used in this manual:

SCREEN MESSAGES	Denotes actual messages that appear on screen.
NOTE	Gives bits and pieces of additional information related to the current topic.
WARNING	Alerts you to any damage that might result from doing or not doing specific actions.
CAUTION	Gives precautionary measures to avoid possible hardware or software problems.
IMPORTANT	Reminds you to do specific actions relevant to the accomplishment of procedures.

Preface

Before using this information and the product it supports, please read the following general information.

- 1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
- 2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

System S	Specifications	1
	Features	
	Your Acer Notebook tour	.5
	Front View	
	Closed Front View	
	Left View	
	Right View	
	Bottom Panel	
	Indicators	
	Easy-Launch Buttons	
	Touchpad Basics	
	Using the Keyboard	
	Lock Keys and embedded numeric keypad	
	Windows Keys	14
	Hot Keys	15
	Special Key	
	Acer Empowering Technology	
	Empowering Technology password	
	Acer eNet Management	
	Acer ePower Management	
	Acer ePresentation Management	
	Acer el ack Management	
	Acer eLock Management	
	Acer eSettings Management	
	Windows Mobility Center	
	Using the System Utilities	
	NTI Shadow	
	Acer GridVista (dual-display compatible)	
	Launch Manager	
	Norton Internet Security	
	Hardware Specifications and Configurations	
System I	•	39
System		
	BIOS Setup Utility	
	Navigating the BIOS Utility	
	Information	
	Main	
	Advanced	
	Security	
	Exit	
	BIOS Flash Utility	
	Remove HDD/BIOS Utility	
Machine	•	57
Wacillie		
	Disassembly Requirements	
	General Information	
	Pre-disassembly Instructions	
	Disassembly Process	
	External Module Disassembly Process	აყ

	External Modules Disassembly Flowchart	
	Removing the Battery Pack	
	Removing the SD dummy card	
	Removing the PC and ExpressCard dummy cards	
	Removing the Lower Cover	
	Removing the DIMM	
	Removing the WLAN Board Modules	64
	Removing the Hard Disk Drive Module	65
	Removing the Optical Drive Module	66
	Main Unit Disassembly Process	69
	Main Unit Disassembly Flowchart	69
	Removing the Modem Board	70
	Removing the Heatsink Fan Module	
	Removing the CPU and VGA Heatsink Module	
	Removing the CPU	
	Removing the VGA board (for Discrete model only)	
	Removing the Middle Cover and the Power Board	
	Removing the Keyboard	
	Removing the LCD Module	
	Separating the Upper Case from the Lower Case	
	Removing the Launch Board	
	Removing the Laurier Board Module	
	Removing the main board	
	Removing the Speaker Modules	
	Removing the USB Board	
	LCD Module Disassembly Process	
	LCD Module Disassembly Flowchart	
	Main Screw List	
	Removing the LCD Bezel	
	Removing the LCD module with the Brackets	
	Removing the Inverter Board and FPC Cable	
	Removing the LCD Brackets	
	Removing the Left and Right Hinge	
	Removing the Antennas	
	Removing the Internal Microphone and Web Camera	99
Trouble	shooting	101
i i oabio	onooting	
	System Check Procedures	102
	External Diskette Drive Check	102
	External CD-ROM Drive Check	
	Keyboard or Auxiliary Input Device Check	102
	Memory check	103
	Power System Check	103
	Touchpad Check	105
	Power-On Self-Test (POST) Error Message	
	Index of Error Messages	
	Phoenix BIOS Beep Codes	
	Index of Symptom-to-FRU Error Message	
	Intermittent Problems.	
	Undetermined Problems	
Jumper	and Connector Locations	121
	Top View	
	Bottom View	122

FRU (Field Replaceable Unit) List	125
TravelMate 5720/5320 and Extensa 5620/5220 Exploded Diagram .	126
Model Definition and Configuration	136
TravelMate 5720/5320 Series	
Test Compatible Components	163
Microsoft® Windows® Vista Environment Test	164
Online Support Information	167
Index	169

System Specifications

Features

Below is a brief summary of the computer's many feature:

PI.	atfo	rm	and	memory	V
-----	------	----	-----	--------	---

Storage subsystem

models)

	Intel® Core [™] 2 Duo Mobile processor T7300/T7500/T7700/T7800 (4 MB L2 cache, 2/2.2/2.4/2.6 GHz, 800 MHz FSB), or T7100/T7250 (2 MB L2 cache, 1.8/2.0 GHz, 800 MHz FSB), or higher, supporting Intel® 64 architecture (for selected models)
	Intel® Celeron® M processor 530/540/550 (1 MB L2 cache, 1.73/1.86/2.0 GHz, 533 MHz FSB) or higher, supporting Intel® 64 architecture (for selected models)
	Intel® Pentium® Dual-Core processor T2310/T2330 (1 MB L2 cache, 1.46/1.6 GHz, 533 MHz FSB) or higher (for selected models)
	Mobile Intel® PM965/GM965/960 Express Chipset (for selected models)
	Intel® Wireless WiFi Link 4965AGN (dual-band quad-mode 802.11a/b/g/Draft-N) network connection, supporting Acer SignalUp™ with InviLink™ Nplify™ wireless technology (for selected models), or
	Intel® PRO/Wireless 3945ABG (dual-band tri-mode 802.11a/b/g) Wi-Fi CERTIFIED® network connection, supporting Acer SignalUp™ wireless technology (for selected models)
	Up to 2 GB of DDR2 667 MHz memory, upgradeable to 4 GB using two soDIMM modules (dual-channel support)
Display	and graphics
	15.4" WXGA TFT LCD, 1280 x 800 pixel resolution, supporting simultaneous multi-window viewing via Acer GridVista™
	Mobile Intel® GM965 Express Chipset with integrated 3D graphics, featuring Intel® Graphic Media Accelerator (GMA) X3100 with up to 358 MB of Intel® Dynamic Video Memory Technology 4.0 (8MB of dedicated system memory, up to 358 MB of shared system memory), supporting Microsoft® DirectX® 9 and DirectX® 10 (for selected models) or
	ATI Mobility™ Radeon® X2500 with up to 1024 MB of HyperMemory™ (256 MB of dedicated GDDR2 VRAM, up to 768 MB of shared system memory) supporting Microsoft® DirectX® 9 and PCI Express® (for selected models)
	Mobile Intel® 945GM/943GML Express Chipset with integrated 3D graphics, featuring Intel® Graphics Media Accelerator (GMA) 950 with up to 224 MB of shared system memory, supporting Microsoft® DirectX® 9 and PCI Express® (for selected models)
	ATI Mobility™ Radeon® X2500, HD2400XT or HD2600 with up to 896 MB of HyperMemory™ (128 MB of dedicated GDDR2 VRAM, up to 768 MB of shared system memory) supporting Microsoft® DirectX® 9 and PCI Express® (for selected models)
	Dual independent display support
	16.7 million colors
	MPEG-2/DVD hardware-assisted capability
	S-video/TV-out (NTSC/PAL) support
	DVI-D (true digital video interface) support (for selected models)

Chapter 1 1

80/120/160 GB or larger hard disk drive with Acer Disk Anti-Shock Protection (DASP) (for selected

Ţ	_	80/120/160 GB or larger hard disk drive with Acer Disk Anti-Shock Protection (DASP) enhancement (for selected models)
Ţ	_	Optical drive options:
		▶ DVD-Super Multi double-layer drive
		▶ DVD/CD-RW combo drive
Ţ		5-in-1 card reader supporting Secure Digital (SD), MultiMediaCard (MMC), Memory Stick® (MS), Memory Stick PRO™ (MS PRO), xD-Picture Card™ (xD)
Inpu	ut c	devices
[88-/89-key Acer FineTouch™ keyboard with 5-degree curve, inverted "T" cursor layout; 2.5mm (minimum) key travel
[Seamless touchpad pointing device with Acer BioProtect fingerprint reader supporting Acer FingerNav 4-way control function (manufacturing option)
Ţ		Seamless touchpad pointing device with 4-way scroll button (manufacturing option)
[12 function keys, four cursor keys, two Windows® keys, hotkey controls, embedded numeric keypad, international language support, independent Euro and US dollar sign keys
Ţ	_	Easy-launch buttons: Acer Empowering Key, Internet, email, user-progammable
Ţ	_	Productivity keys: Lock, Presentation, Sync
Ţ	_	Front-access communication switches: WLAN and Bluetooth®
Aud	lio	
Ţ		Two built-in Acer 3DSonic stereo speakers
Ţ	_	Intel® High Definition Audio support
Ţ	_	Built-in microphone
Ţ		MS-Sound compatible
Con	nmı	unication
Ţ		Acer Video Conference featuring:
		▶Integrated Acer CrystalEye webcam supporting enhanced Acer PrimaLite™ technology
		♦Optional Acer Xpress VoIP phone
Ţ		WLAN: Intel® Wireless WiFi Link 4965AGN (dual-band quad-mode 802.11a/b/g/Draft-N) network connection, supporting Acer SignalUp™ with InviLink™ Nplify™ wireless technology (for selected models), or Intel® PRO/Wireless 3945ABG (dual-band tri-mode 802.11a/b/g) Wi-Fi CERTIFIED® network connection, supporting Acer SignalUp™ wireless technology (for selected models), or Acer InviLink 802.11b/g Wi-Fi CERTIFIED® solution, supporting Acer SingalUp™ wireless technology (for selected models)
Ţ	_	WPAN: Bluetooth® 2.0+EDR (Enhanced Data Rate)
Ţ		LAN: Gigabit Ethernet; Wake-on-LAN ready
Ţ	ב	Modem: 56K ITU V.92 with PTT approval; Wake-on-Ring ready
I/O I	Por	ts
Ţ	_	ExpressCard [™] /54 slot
Ţ	_	PC Card slot (one Type II)
Ţ	_	5-in-1 card reader (MS/MS PRO/MMC/SD/xD)
Ţ	_	Four USB 2.0 ports
	_ _	DVI-D port (for selected models)
	_	IEEE 1394 port
	_ _	Fast Infrared (FIR) port (for selected models)

	External display (VGA) port
	S-video/TV-out (NTSC/PAL) port
	Headphones/speaker/line-out jack
	Line-in jack
	Microphone jack
	Ethernet (RJ-45) port
	Modem (RJ-11) port
	DC-in jack for AC adaptor
viro	nment

Environment

Temperature:

♦Operating: 5 °C to 35 °C

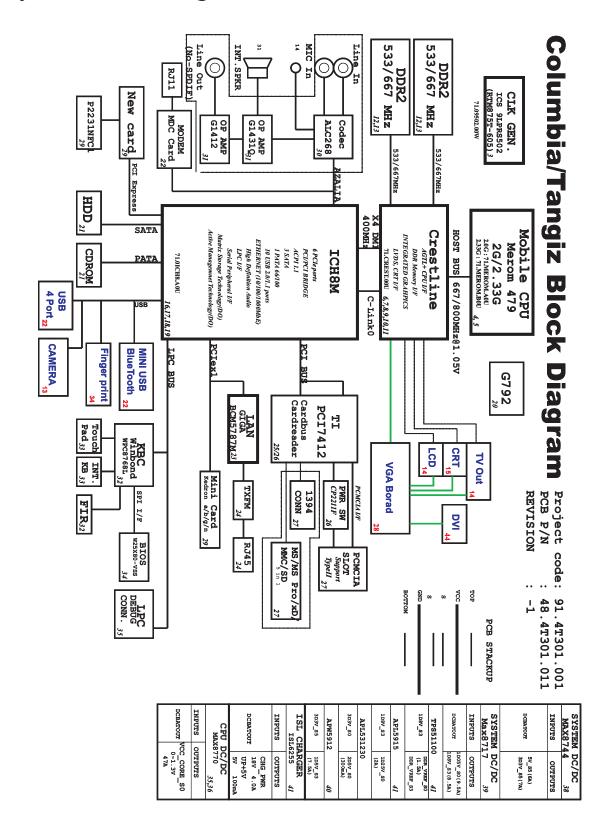
Non-operating: -20 °C to 65 °C

☐ Humidity (non-condensing):

➤Operating: 20% to 80%

Non-operating: 20% to 80%

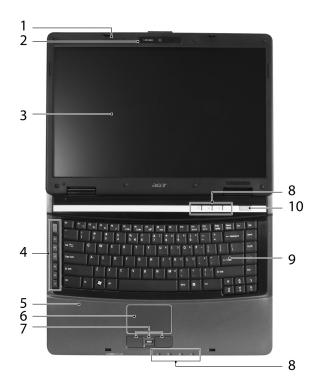
System Block Diagram



Your Acer Notebook tour

After knowing your computer features, let us show you around your new TravelMate computer.

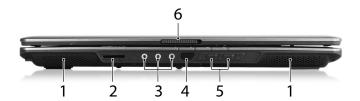
Front View



	Icon	Item	Description
1		Microphone	Internal microphone for sound recording.
2		Acer CrystalEye	0.3 megapixel web camera for video communication.
3		Display screen	Also called Liquid-Crystal Display (LCD), displays computer output.
4		Easy-launch buttons	Buttons for launching frequently used programs.
5		Palmrest	Comfortable support area for your hands when you use the computer.
6		Touchpad	Touch-sensitive pointing device which functions like a computer mouse.
7		Click buttons (left, center* and right)	The left and right buttons function like the left and right mouse buttons.
			*The center button serves as Acer BioProtect fingerprint reader supporting Acer FingerNav 4-way control function (manufacturing option) or a 4-way scroll button (manufacturing option).

	lcon	Item	Description
8		Status indicators	Light-Emitting Diodes (LEDs) that light up to show the status of the computer's functions and components.
9		Keyboard	For entering data into your computer.
10		Power button	Turns the computer on and off.

Closed Front View



	Icon	ltem	Description
1		Speakers	Left and right speakers deliver stereo audio output.
2	SA AD PRO	5-in-1 card reader	Accepts Secure Digital (SD, MultiMediaCard (MMC), Memory Stick (MS), Memory Stick Pro (MS PRO), and xD-Picture Card. Note: Only one card can operate at any given time.
3	(+ +)	Line-in jack	Accepts audio line-in devices (e.g., audio CD player, stereo walkman, mp3 player)
	100	Microphone jack	Accepts inputs from external microphones.
	8	Headphones/ speaker/line-out jack	Connects to audio line-out devices (e.g., speakers, headphones).
4		Infrared port	Interfaces with infrared devices (e.g., infrared printer and IR-aware computer).
5	*	Bluetooth communication switch	Enable/disable the Bluetooth function. Indicates the status of Bluetooth communication (manufacturing option).
	C	Wireless communication switch	Enable/disable the wireless function. Indicates the status of wireless LAN communication (manufacturing option).
6		Latch	Locks and releases the lid.

Left View



#	Icon	Item	Description
1	ß	Kensington lock slot	Connects to a Kensington-compatible computer security lock.
2	용	Ethernet (RJ-45) port	Connects to an Ethernet 10/100/1000-based network.
3		External display (VGA) port	Connects to a display device (e.g., external monitor, LCD projector).
4	DVI-D	DVI-D port	Supports digital video connections.
5		S-Video/TV-out (NTSC/PAL) port	Connects to a television or display device with S-video input.
6	•	USB 2.0 port	Connects to USB 2.0 devices (e.g., USB mouse, USB camera).
7	1394	IEEE 1394 port	Connects to IEEE 1394 devices.
8	EXPRESS CARD	ExpressCard/54 slot	Accepts one ExpressCard/54 module.
9		PC Card slot eject button	Ejects the PC Card from the slot.
10		PC Card slot	Accepts one Type II PC Card.

Right View



	Icon	Item	Description
1		Optical drive	Internal optical drive; accepts CDs or DVDs
2		Optical disk access indicator	Lights up when the optical drive is active.

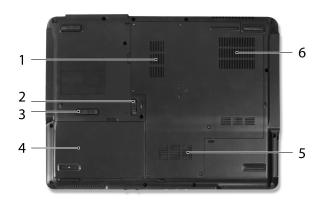
	Icon	Item	Description
3		Optical drive eject button	Ejects the optical disk from the drive.
4		Emergency eject hole	Ejects the optical drive tray when the computer is turned off.

Rear Panel



#	Icon	Item	Description
1	•	Three USB 2.0 ports	Connect to USB 2.0 devices (e.g., USB mouse, USB camera).
2		Modem (RJ-11) port	Connects to a phone line.
3		DC-in jack	Connects to an AC adapter.
4		Ventilation slots	Enable the computer to stay cool, even after prolonged use.

Bottom Panel



	Icon	Item	Description
1		Memory compartment	Houses the computer's main memory.
2		Battery lock	Locks the battery in position.
3		Battery release latch	Releases the battery to remove the battery pack.
4		Battery bay	Houses the computer's battery pack.
5		Hard disk bay	Houses the computer's hard disk (secured with screws)
6		Ventilation slots	Enable the computer to stay cool, even after prolonged use.

Indicators

The computer has several easy-to-read status indicators:



The front panel indicators are visible even when the computer cover is closed.

Icon	Function	Description	
Ç	Power	Indicates the computer's power status.	
<u> </u>	Battery	Indicates the computer's battery status.	
8	Bluetooth	Indicates the status of Bluetooth communication.	
,C	Wireless LAN	Indicates the status of wireless LAN communication.	
*	HDD	Indicates when the hard disk drive is active.	
ត	Num Lock	Lights up when Num Lock is activated.	
A	Caps Lock	Lights up when Caps Lock is activated.	

NOTE: 1. **Charging:** The light shows amber when the battery is charging. 2. **Fully charged:** The light shows green when in AC mode.

Easy-Launch Buttons

There are several conveniently located easy-launch buttons. They are: mail Web browser, Empowering Key " \mathcal{C} " and one user-programmable button.

Press "C" to run the Acer Empowering Technology. The mail and Web browser buttons are pre-set to email and Internet programs, but can be reset by users. To set the Web browser, mail and programmable buttons, run the Acer Launch Manager.



Launch key	Default application
e	Acer Empowering Technology (user-programmable)
	Email application (user-programmable)
\bowtie	
	Internet browser (user-programmable)
B	
Р	User-programmable

Three productivity keys give users one-touch access to protection and manageability features for a more secure, smarter and easier way to work.

- Lock key runs the Windows® lock function to lock the notebook when you step out. If the laptop is equipped with Acer BioProtect, you only need to swipe your finger to log into Windows® again.
- Presentation key minimizes open application windows and prepares the display for impressive presentations.
- ☐ Sync key instantly synchronizes your computer system to an external storage device, for convenient and secure backup.

Icon	Productivity key	Default application
۶	Lock	Launch Windows Lock function
9	Presentation	Minimizes your open windows and prepares your display for presenting
tì	Sync	Launch NTI Shadow

Touchpad Basics

The following teaches you how to use the touchpad:



- ☐ Move your finger across the touchpad (2) to move the cursor.
- Press the left (1) and right (4) buttons located beneath the touchpad to perform selection and execution functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the touchpad is the same as clicking the left button.
- Use the 4-way scroll (3) button to scroll up or down and move left or right a page. This button mimics your cursor pressing on the right scroll bar of Windows applications.

Function	Left Button (1)	Right Button (4)	Main touchpad (2)	Center button (3)
Execute	Click twice quickly		Tap twice (at the same speed as double- clicking the mouse button)	
Select	Click once		Tap once	
Drag	Click and hold, then use finger to drag the cursor on the touchpad		Tap twice (at the same speed as double-clicking a mouse button) then hold finger to the touchpad on the second tap to drag the cursor.	
Access context menu		Click once		

Function	Left Button (1)	Right Button (4)	Main touchpad (2)	Center button (3)
Scroll				Click and hold to move up/down/left/right.

NOTE: When using the touchpad, keep it - and your fingers - dry and clean. The touchpad is sensitive to finger movement; hence, the lighter the touch, the better the response. Tapping too hard will not increase the touchpad's responsiveness.

NOTE: By default, vertical and horizontal scrolling is enabled on your touchpad. It can be disabled under Mouse settings in Windows Control Panel.

Using the Keyboard

The keyboard has full-sized keys and an embedded numeric keypad, separate cursor, lock, Windows, function and special keys.

Lock Keys and embedded numeric keypad

The keyboard has three lock keys which you can toggle on and off.



Lock key	Description	
Caps Lock	When Caps Lock is on, all alphabetic characters typed are in uppercase.	
Num Lock <fn> + <f11></f11></fn>	When Num Lock is on, the embedded keypad is in numeric mode. The keys function as a calculator (complete with the arithmetic operators +, -, *, and /). Use this mode when you need to do a lot of numeric data entry. A better solution would be to connect an external keypad.	
Scroll Lock <fn> + <f12></f12></fn>	When Scroll Lock is on, the screen moves one line up or down when you press the up or down arrow keys respectively. Scroll Lock does not work with some applications.	

The embedded numeric keypad functions like a desktop numeric keypad. It is indicated by small characters located on the upper right corner of the keycaps. To simplify the keyboard legend, cursor-control key symbols are not printed on the keys.

Desired access	Num Lock on	Num Lock off
Number keys on embedded keypad	Type numbers in a normal manner.	
Cursor-control keys on embedded keypad	Hold <shift></shift> while using cursor-control keys.	Hold <fn></fn> while using cursor-control keys.
Main keyboard keys	Hold <fn></fn> while typing letters on embedded keypad.	Type the letters in a normal manner.

Windows Keys

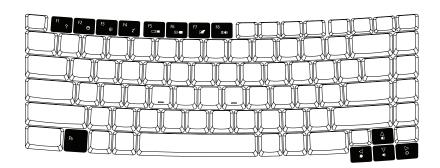
The keyboard has two keys that perform Windows-specific functions.

Key		Description	Key	
*	Windows key	Pressed alone, this key has the same effect as clicking on the Windows Start button; it launches the Start menu. It can also be used with other keys to provide a variety of functions:		Windows key
		<>> : Open or close the Start menu		
		< ₽> + <d>:</d> Display the desktop		
		< ℰ> + <e>:</e> Open Windows Explore		
		< ₽> + <f>:</f> Search for a file or folder		
		< ₽> + <g>:</g> Cycle through Sidebar gadgets		
		<>> + <l>: Lock your computer (if you are connected to a network domain), or switch users (if you're not connected to a network domain)</l>		
		<>> + <m>: Minimizes all windows</m>		
		< ☞> + <r>:</r> Open the Run dialog box		
		< ₽> + <t>:</t> Cycle through programs on the taskbar		
		< ℰ> + <u>:</u> Open Ease of Access Center		
		<>> + <x>: Open Windows Mobility Center</x>		
		→ + <break>: Display the System Properties dialog box</break>		
		<>> + <shift+m>: Restore minimized windows to the desktop</shift+m>		
		→ + <tab>: Cycle through programs on the taskbar by using Windows Flip 3-D</tab>		
		<>> + <spacebar>: Bring all gadgets to the front and select Windows Sidebar</spacebar>		
		<ctrl> + <(**)> + <f>: Search for computers (if you are on a network)</f></ctrl>		
		<ctrl> + < > + < TAB>: Use the arrow keys to cycle through programs on the taskbar by using Windows Flip 3-D Note: Depending on your edition of Windows Vista, some shortcuts may not function as described.</ctrl>		
	Application key	some shortcuts may not function as described. This key has the same effect as clicking the right mouse button; it opens the application's context menu.		Application key

Hot Keys

The computer employs hotkeys or key combinations to access most of the computer's controls like sreen brightness, volume output and the BIOS utility.

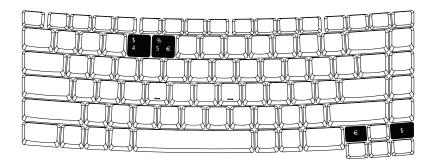
To activate hot keys, press and hold the **<Fn>** key before pressing the other key in the hotkey combination.



Hotkey	Icon	Function	Description
<fn> + <f1></f1></fn>	?	Hotkey help	Displays help on hotkeys.
<fn> + <f2></f2></fn>	©	Acer eSettings	Launches Acer eSettings in Acer Empowering Technology.
<fn> + <f3></f3></fn>	♦	Acer ePower Management	Launches Acer ePower Management in Acer Empowering Technology.
<fn> + <f4></f4></fn>	Z ^z	Sleep	Puts the computer in Sleep mode.
<fn> + <f5></f5></fn>		Display toggle	Switches display output between the display screen, external monitor (if connected) and both.
<fn> + <f6></f6></fn>	*	Screen blank	Turns the display screen backlight off to save power. Press any key to return.
<fn> + <f7></f7></fn>		Touchpad toggle	Turns the internal touchpad on and off.
<fn> + <f8></f8></fn>	₫/◀»	Speaker toggle	Turns the speakers on and off.
<fn> + <↑></fn>	()	Volume up	Increases the sound volume.
<fn> + <↓></fn>	()	Volume down	Decreases the sound volume.
<fn> + <→></fn>	Ö	Brightness up	Increases the screen brightness.
<fn> + <←></fn>	. ₩.	Brightness down	Decreases the screen brightness.

Special Key

You can locate the Euro symbol and the US dollar sign at the upper-center and/or bottom-right of your keyboard.



The Euro symbol

- 1. Open a text editor or word processor.
- 2. Either press < € > at the bottom-right of the keyboard, or hold <Alt Gr> and then press the <5> key at the upper-center of the keyboard.

The US dollar sign

- 1. Open a text editor or word processor.
- 2. Either directly press the < \$ > key at the bottom-right of the keyboard, or hold <**Shift>** and then press the <**4>** key at the upper-center of the keyboard.

NOTE: This function varies by the operating system version.

NOTE: Some fonts and software do not support the Euro symbol. Please refer to www.microsoft.com/typography/faq/faq12.htm for more information.

Acer Empowering Technology

The Empowering Technology toolbar makes it easy for you to access frequently used functions and manage your new Acer system. Displayed by default in the upper half of your screen, it provides access to the following utilities:

- □ Acer eNet Management hooks up to location-based networks intelligently.
- ☐ Acer ePower Management optimizes battery usage via customizable power plans.
- Acer ePresentation Management connects to a projector and adjusts display settings.
- ☐ Acer eDataSecurity Management protects data with passwords and encryption.
- □ Acer eLock Management limits access to external storage media.
- Acer eRecovery Management backs up and recovers data flexibly, reliably and completely.
- □ Acer eSettings Management accesses system information and adjusts settings easily.



For more information, right click on the Empowering Technology toolbar, then select the "Help" or "Tutorial" function.

Empowering Technology password

Before using Acer eLock Management and Acer eRecovery Management, you must initialize the Empowering Technology password. Right-click on the Empowering Technology toolbar and select "Password Setup" to do so. If you have not initialized the Empowering Technology password and run Acer eLock Management or Acer eRecovery Management, you will be asked to create it.

NOTE: If you lose the Empowering Technology password, there is no way to reset it except by reformatting your system. Make sure to remember or write down your password!

Acer eNet Management 3

Acer eNet Management helps you quickly connect to both wired and wireless networks in a variety of locations. To access this utility, select "Acer eNet Management" from the Empowering Technology toolbar or run the program from the Acer Empowering Technology program group in Start menu. You can also set Acer eNet Management to start automatically when you boot up your PC.

Acer eNet Management automatically detects the best settings for a new location, while offering you the option to manually adjust the settings to match your needs.



Acer eNet Management can save network settings for a location to a profile, and automatically switch to the appropriate profile when you move from one location to another. Settings stored include network connection settings (IP and DNS settings, wireless AP details, etc.), as well as default printer settings. Security and safety concerns mean that Acer eNet Management does not store username and password information.



Acer ePower Management 🗈

Acer ePower Management features a straightforward user interface for configuring your power management options. To access this utility, select "Acer ePower Management" from the Empowering Technology toolbar, run the program from the Acer Empowering Technology program group in Start menu, or right-click the Windows power icon in the system tray and select "Acer ePower Management".

Using power plans

Acer ePower Management comes with three predefined power plans: Balanced, High performance and Power saver. You can also create customized power plans. You can create, switch between, edit, delete and restore power plans, as described below.

View and adjust settings for On Battery and Plugged In modes by clicking the appropriate tabs. You can open Windows power options by clicking **"More Power Options"**.

NOTE: You cannot delete the predefined power plans.

To create a new power plan:

Creating customized power plans allows you to save and quickly switch to a personalized set of power options.

- Click the Create Power Plan icon.
- Enter a name for your new power plan.
- 3. Choose a predefined power plan to base your customized plan on.
- 4. If necessary, change the display and sleep settings you want your computer to use.
- 5. Click "OK" to save your new power plan.

To switch between power plans:

- 1. Select the power plan you wish to switch to from the drop-down list.
- 2. Click "Apply".

To edit a power plan:

Editing a power plan allows you to adjust system settings like LCD brightness and CPU speed. You can also turn on/off system components to extend battery life.

- 1. Switch to the power plan you wish to edit
- Adjust settings as required.
- 3. Click "Apply" to save your new settings.

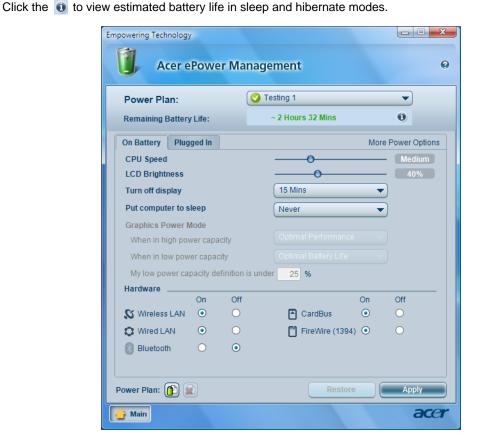
To delete a power plan:

You cannot delete the power plan you are currently using. If you want to delete the active power plan, switch to another one first.

- 1. Select the power plan you wish to delete from the drop-down list.
- Click the Delete Power Plan icon.

Battery status

For real-time battery life estimates based on current usage, refer to the panel in the upper half of the window.



Acer ePresentation Management

Acer ePresentation Management lets you project your computer's display to an external display device or projector using the hotkey: <Fn> + <F5>. If auto-detection hardware is implemented in the system and the external display supports it, your system display will be automatically switched out when an external display is

connected to the system. For projectors and external devices that are not auto-detected, launch Acer ePresentation Management to choose an appropriate display setting.



NOTE: If the restored resolution is not correct after disconnecting a projector, or you need to use an external resolution that is not supported by Acer ePresentation Management, adjust your display settings using Display Properties or the utility provided by the graphics vendor.

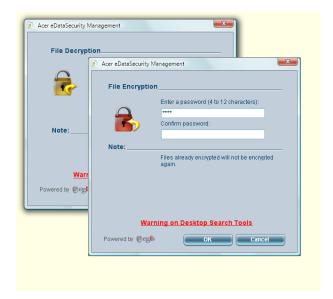
Acer eDataSecurity Management 🛐

Acer eDataSecurity Management is an encryption utility that protects your files from being accessed by unauthorized persons. It is conveniently integrated with Windows Explorer as a shell extension for quick data encryption/decryption and also supports on-the-fly file encryption for Lotus Notes and Microsoft Outlook.

The Acer eDataSecurity Management setup wizard will prompt you for a supervisor password and default encryption password. This password will be used to encrypt files by default, or you can choose to enter your own password when encrypting a file.



NOTE: The password used to encrypt a file is the unique key that the system needs to decrypt it. If you lose the password, the supervisor password is the only other key capable of decrypting the file. If you lose both passwords, there will be no way to decrypt your encrypted file! **Be sure to safeguard all related passwords!**



Acer eLock Management 🗈

Acer eLock Management is simple yet effective utility that allows you to lock removable storage, optical and floppy drive devices to ensure that data can't be stolen while your system is unattended.

- Removable Storage Devices includes USB disk drives, USB pen drives, USB flash drives, USB MP3 drives, USB memory card readers, IEEE 1394 disk drives, and any other removable storage devices that can be mounted as a file system when plugged into the system.
- Optical Drive Devices includes any kind of CD-ROM, DVD-ROM, HD-DVD or Blu-ray drive devices.
- ☐ Floppy Drive Devices 3.5-inch floppy drives only.

To use Acer eLock Management, the Empowering Technology password must be set first. Once set, you can apply locks to any of the devices types. Lock(s) will immediately be set without any reboot necessary, and will remain after rebooting, until removed.

NOTE: If you lose the Empowering Technology password, there is no method to reset it except by reformatting your system. Make sure to remember or write down your password.



Acer eRecovery Management 🕟

Acer eRecovery Management is a versatile backup utility. It allows you to create full or incremental backups, burn the factory default image to optical disc, and restore from previously created backups or reinstall applications and drivers. By default, user-created backups are stored to the D:\ drive.

Acer eRecovery Management provides you with:

- Password protection (Empowering Technology password)
- ☐ Full and incremental backups to hard disk or optical disc
- Creation of backups:
 - ▶Factory default image
 - ◆User backup image
 - Current system configuration
 - ▶Application backup
- Restore and recovery:
 - >Factory default image
 - ♦User backup image
 - ▶From previously-created CD/DVD
 - ▶Reinstall applications/drivers



For more information, please refer to "Acer eRecovery Management" on page 61 in the AcerSystem User's Guide.

NOTE: If your computer did not come with a Recovery CD or System CD, please use Acer eRecovery Management's "System backup to optical disc" feature to burn a backup image to CD or DVD. To ensure the best results when recovering your system using a CD or Acer eRecovery Management, detach all peripherals (except the external Acer ODD, if your computer has one), including your Acer ezDock.

Acer eSettings Management 🔯

Acer eSettings Management allows you to inspect hardware specifications, set BIOS passwords and modify boot options.

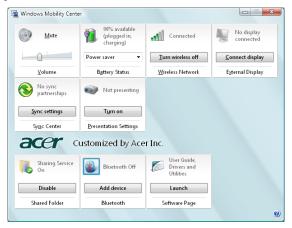
Acer eSettings Management also:

- Provides a simple graphical user interface for navigation.
- Prints and saves hardware specifications.

Lets you set an asset tag for your system.



Windows Mobility Center



The Windows Mobility Center collects key mobile-related system settings in one easy-to-find place, so you can quickly configure your Acer system to fit the situation as you change locations, networks or activities. Settings include display brightness, power plan, volume, wireless networking on/off, external display settings, display orientation and synchronization status.

Windows Mobility Center also includes Acer-specific settings like Bluetooth Add Device (if applicable), sharing folders overview/sharing service on or off, and a shortcut to the Acer user guide, drivers and utilities.

To launch Windows Mobility Center:

- ☐ Use the shortcut key <**(**)> + <X>**
- □ Start Windows Mobility Center from the Control panel
- ☐ Start Windows Mobility Center from the Accessories program group in the Start menu.

Using the System Utilities

NTI Shadow

NTI Shadow allows users to schedule continuous backup jobs that copy the contents of one or more folders (the "backup source") to another location (the "backup destination"). The backup jobs are continuous because they are scheduled to regularly update the data in the backup folder either continuously or in user-defined intervals. You can schedule a job to run every certain number of minutes, on certain days at a specified time, or whenever any data in the backup source are modified.

Shadow can also be configured to archive file versions. If this option is enabled, then any file that is saved or overwritten will trigger Shadow to archive the previous version of the file. The file versions are stored in a Revisions folder in the backup destination. Users can configure how many versions of a file to maintain.

Shadow supports backups on local hard drives, USB/FireWire external hard drives, USB pen drives, NAS devices, and any drive with drive letter access.

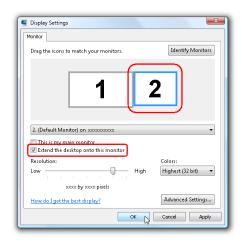
Launching the utility is as easy as pressing one buttons. For more information refer to the NTI Shadow help files.



Acer GridVista (dual-display compatible)

NOTE: This feature is only available on certain models.

To enable the dual monitor feature of the notebook, first ensure that the second monitor is connected, then select **Start, Control Panel, Display** and click on **Settings**. Select the secondary monitor **(2)** icon in the display box and then click the check box **Extend my windows desktop onto this monitor**. Finally, click **Apply** to confirm the new settings and click **OK** to complete the process.



Acer GridVista is a handy utility that offers four pre-defined display settings so you can view multiple windows on the same screen. To access this function, please go to **Start>All Programs** and click on **Acer GridVista**. You may choose any one of the four display settings indicated below:

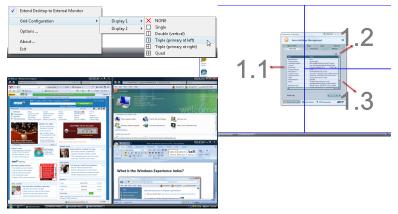


Double (verticle), Triple (primary at left), Triple (primary at right), or Quad Acer Gridvista is dual-display compatible, allowing two displays to be partitioned indepently.

Acer Gridvista is dual-display compatible, allowing two displays to be partitioned independently.

AcerGridVista is imple to set up:

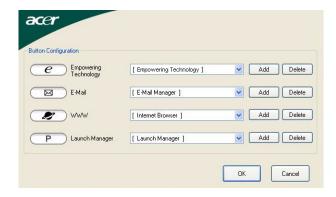
- 1. Run Acer GridVista and select your preferred screen configuration for each display from the task bar.
- 2. Drag and drop each window into the appropriate grid.
- 3. Enjoy the convenience of a well-organized desktop.



NOTE: Please ensure that the resolution setting of the second monitor is set to the manufacturer's recommended value.

Chapter 1 27

Launch Manager



Launch Manager allows you to set the four easy-launch buttons located above the keyboard. You can access the Launch Manager by clicking on Start > All Programs > Launch Manager to start the application.

Norton Internet Security

Norton Internet Security is an anti-virus utility that can protect against viruses, keeping your data safe and secure.

How do I check for viruses?

- 1. Double-click the Norton Internet Security icon on the Windows desktop.
- 2. Select Tasks & Scans.
- 3. Select Run Scan to scan your system.



4. When the scan is complete, review the results of the scan.

NOTE: For optimal security, run a Full System Scan when scanning your computer for the first time.

You can schedule customized virus scans that run unattended on specific dates and times or at periodic intervals. If you are using the computer when the scheduled scan begins, it runs in the background so that you do not have to stop working.

For more information refer to the Norton Internet Security help files.

Hardware Specifications and Configurations

Processor

Item	Specification
CPU type	Intel® Core [™] 2 Duo Mobile Processor T7300/T7500/T7700/T7800 (4 MB L2 cache, 2/2.2/2.4/2.6 GHz, 800 MHz FSB), or T7100/ T7250 (2 MB L2 cache, 1.8/2.0 GHz, 800 MHz FSB)
	Intel® Core [™] 2 Duo Mobile Processor T5250/T5450 (2 MB L2 cache, 1.60/1.73 GHz, 533 MHz FSB)
	Intel® Celeron® M processor 530/540/550 (1 MB L2 cache, 1.73/ 1.86/2.0 GHz, 533 MHz FSB)
	Intel® Pentium® Dual-Core processor T2310/T2330 (1 MB L2 cache, 1.46/1.6 GHz, 533 MHz FSB) or higher (for selected models)
Core logic	Mobile Intel® PM965/GM965/960 + ICH8M Express Chipset
CPU package	Socket M (FCPGA6)
CPU core voltage	1.0375V to 1.3V

CPU Fan True Value Table

DTS(degree C)	Fan Speed (rpm)	Acoustic Level (dBA)
45-50	0-3000	29
55-66	0-3300	33
68-74	3300-3800	38
78-83	3800-4100	40
86-91	4100-4800	40

Throttling 50%: On= 99°C; OFF=93°C

OS shut down at 105° C; H/W shot down at 110° .C

BIOS

Item	Specification
BIOS vendor	Phoenix
BIOS Version	1.02 (MP version)
BIOS ROM type	SST/AMD 1MB CMOS Boot Block Flash Memory
BIOS ROM size	1M byte FLASH ROM SST
BIOS package	10-lead TSOP (10mmx20mm)
Supported protocols	ACPI 1.0b/2.0/3.0 compliance, PCI 2.2, System/HDD Password Security Control, INT 13H Extenstions, PnP BIOS 1.0a SMBIOS 2.4, BIOS Boot Specification, Simple Boot Flag 1.0, Boot Block, PCI Bus Power Management Interface Specification, USB Specification 1.1/2.0, IEEE 1394 1.0, USB/1394 CD-ROM Boot Up support, PC Card Standard 1995 (PCMCIA 3.0 Compliant Device), IrDA 1.0, Intel AC97 CNR Specification, WfM 2.0, PXE 2.1, Boot Integrity Service Application Program Interface (BIS) 1.0, PC99a and Mobile PC2001 Compliant
BIOS password control	Set by setup manual

Item	Specification
Cache controller	Built-in CPU

Chapter 1 29

Item	Specification
Cache size	1MB to 4MB (See CPU type)

System Memory

Item	Specification
Memory controller	Built-in
Memory size	0MB (no on-board memory)
DIMM socket number	2 sockets
Supports memory size per socket	2048MB
Supports maximum memory size	4G for 64bit OS(with two 2GB SODIMM)
Supports DIMM type	DDR 2 Synchronous DRAM
Supports DIMM Speed	533/677 MHz
Supports DIMM voltage	1.8V and 0.9V
Supports DIMM package	200-pin soDIMM
Memory module combinations	You can install memory modules in any combinations as long as they match the above specifications.

Memory Combinations

Slot 1	Slot 2	Total Memory
0MB	256MB	256MB
0MB	512MB	512MB
0MB	1024MB	1024MB
0MB	2048MB	2048MB
256MB	256MB	512MB
256MB	512MB	768MB
256MB	1024MB	1280MB
256MB	2048MB	2304MB
512MB	256MB	768MB
512MB	512MB	1024MB
512MB	1024MB	1536MB
512MB	2048MB	2560MB
1024MB	0MB	1024MB
1024MB	256MB	1280MB
1024MB	512MB	1536MB
1024MB	1024MB	2048MB
1024MB	2048MB	3072MB
2048MB	0MB	2048MB
2048MB	256MB	2304MB
2048MB	512MB	2560MB
2048MB	1024MB	3072MB
2048MB	2048MB	4096MB

NOTE: Above table lists some system memory configurations. You may combine DIMMs with various capacities to form other combinations. On above table, the configuration of slot 1 and slot 2 could be

reversed.

Item	Specification		
LAN Chipset	Broadcom 5787M		
Supports LAN protocol	10/100/1000 Mbps		
LAN connector type	RJ45		
LAN connector location	Left side		
Features	Integrated 10/100 BASE-T transceiver Wake on LAN support compliant with ACPI 2.0 PCI v2.2		

Bluetooth Interface

Item	Specification		
Chipset	Foxconn T60H928.01		
Data throughput	723 bps (full speed data rate)		
Protocol	Bluetooth 1.1 (Upgradeable to Bluetooth 1.2 when SIG specification is ratified).		
Interface	USB 1.1		
Connector type	USB		

Wireless Module 802.11b/g

Item	Specification
Chipset	Intel® Wireless WiFi Link 4965AGN (dual-band quad-mode 802.11a/b/g/Draft-N) network connection, supporting Acer SignalUp [™] with InviLink [™] Nplify [™] wireless technology Intel® PRO/Wireless 3945ABG (dual-band tri-mode 802.11a/b/g) Wi-Fi CERTIFIED® network connection, supporting Acer SignalUp [™] wireless technology
Data throughput	11~54 Mbps, up to 270 Mbps for Draft-N
Protocol	802.11b+g, Draft-N
Interface	PCI bus (mini PCI socket for wireless module)

Hard Disk Drive Interface

Item				
Vendor & Model Name	HGST 2.5" HTS541680J9SA00 SURUGA-B	SEAGATE 2.5" ST9120822AS (9S1133-190) Venus SATA	WD 2.5" WD1600BEVS- 22RSTO ML80 SATA	HGST 2.5" HTS541616J9SA00 SURUGA-B
Capacity (MB)	80000	120000	160000	160000
Bytes per sector	512	512	512	512
Data heads	2	3	3	4
Drive Format	Drive Format			
Disks	1	2	2	2

Chapter 1 31

Hard Disk Drive Interface

Item				
Spindle speed (RPM)	5400 RPM	5400 RPM	5400 RPM	5400 RPM
Performance	Specifications			
Buffer size	8MB	8MB	8MB	8MB
Interface	SATA	SATA	SATA	SATA
Max. media transfer rate (disk-buffer, Mbytes/s)	540	540	540	540
Data transfer rate (host~buffer, Mbytes/s)	100 MB/Sec. Ultra DMA mode-5	150 MB/Sec. Ultra DMA mode-5	150 MB/Sec. Ultra DMA mode-5	150 MB/Sec. Ultra DMA mode-5
DC Power Requirements				
Voltage tolerance	5V(DC) +/- 5%	5V(DC) +/- 5%	5V(DC) +/- 5%	5V(DC) +/- 5%

Combo Drive module

Item	Specif	cation
Vendor & model name	SONY COMBO 12.7mm Tray 24X CRX880A	
Performance Specification	With CD Diskette	With DVD Diskette
Transfer rate (KB/sec)	Sustained:	Sustained:
	Max 3.6Mbytes/sec	Max 10.8Mbytes/sec
Buffer Memory	2MB	
Interface	PATA	
Applicable disc format	1. Reads and writes data in each CD-ROM, CD-ROMXA, CD-I FMV, Video CD and CD-EXTRA 2. Reads data in Photo CD (Single and multi session) 3. Reads and writes standard CD-DA 4. Reads and writes CD-R discs conforming to "Orange Book Part 2" 5. Reads and writes CD-RW discs conforming to "Orange Book Part 3" 6. Reads data in DVD-ROM Applicable DVD formats (Read): DVD: DVD-ROM, (DVD-5, DVD-9, DVD-10, DVD-18),DVD-Video, DVD-R 3.95G, DVD-R 4.7G, DVD-RW, DVD+R, DVD+RW, Multi-Border DVD-R/DVD-RW, Multi-session DVD+R, DVD+RW and DVD-RAM (optional) Applicable CD Formats (Read): CD: CD-DA, CD-ROM Mode-1, CD-ROM/XA Mode Mode-2 Form-1 and Mode-2 Form-2, CD-i Ready, Video-CD (MPEG-1), Karaoke CD, Super Video CD, Photo-CD, Enhanced CD, CD Plus, CD Extra, i-trax CD, CD-Text, CD-R, CD-RW Applicable CD Formats (Write) CD-DA, CD-ROM Mode-1, CD-ROM/XA Mode-2 Form-1 and Mode-2 Form-2, CD-i, Video-CD CD-Text	

Combo Drive module

Item	Specification
Loading mechanism	Load: Manual
	Release: (a) Electrical Release (Release Button)
	(b) Release by ATAPI command
	(c) Emergency Release
Power Requirement	
Input Voltage	5 V +/- 5 % (Operating)

Super-Multi Drive module

Item	Specifi	cation
Vendor & model name	HLDS Super-Multi Drive GSA-T20N 8A1P, PIONEER Super-Multi Drive	•
Performance Specification	With CD Diskette	With DVD Diskette
Transfer rate (KB/sec)	Sustained:	Sustained:
	Max 3.6Mbytes/sec	Max 10.08Mbytes/sec
Buffer Memory	2MB	
Interface	PATA	
Applicable disc format		
Loading mechanism	DVD°"R Dual Load: Manual	
Loading moondinam	Release: (a) Electrical Release (Re	lease Button)
	(b) Release by ATAPI com	•
	(c) Emergency Release	
Power Requirement		

Chapter 1 33

Super-Multi Drive module

Item	Specification	
Input Voltage	5 V +/- 5 % (Operating)	

Audio Interface

Item	Specification
Audio Controller	Realtek ALC883 Azalia and Amplifier Maxim MAX9710 & MAX4411
Audio onboard or optional	Built-in
Mono or Stereo	Stereo
Resolution	18 bit stereo full duplex
Compatibility	HD audio Interface; S/PDIF output for PCM or AC-3 content
Sampling rate	1Hz resolution VSR (Variable Sampling Rate)
Internal microphone	Yes
Internal speaker / Quantity	Yes/2 (1.5W speakers)

Video Interface

Item	Specification
Chipset	ATI X2500, HD2400XT or HD2600
Package	Daughter Board
Interface	PCIE
Supports ZV (Zoomed Video) port	Yes

Video Memory

Item	Specification
Chipset	ATI X2500, HD2400XT or HD2600
Memory size	up to 256MB
Interface	GDDR2

Item	Specification
Chipset	ICH8M
USB Compliancy Level	2.0
OHCI	USB 1.1 and USB 2.0 Host controller
Number of USB port	4
Location	One on the left side/three on the rear side
Serial port function control	Enable/Disable by BIOS Setup

PCMCIA Port

Item	Specification
PCMCIA controller	ENE CB714/1410
Supports card type	Type-II

PCMCIA Port

Item	Specification
Number of slots	One type-II
Access location	Left panel
Supports ZV (Zoomed Video) port	No ZV support
Supports 32 bit CardBus	Yes

System Board Major Chips

Item	Controller
Core logic	Mobile Intel® PM965/GM965/960 + ICH8M Express Chipset
VGA	ATI X2500, HD2400XT or HD2600
LAN	Realtek 8100SBL/CL
USB 2.0	Intel ICH8M
Super I/O controller	N/A
MODEM	ALC 883
Bluetooth	Built-in ATI SB460
Wireless 802.11 b+g	Built-in ATI SB460
PCMCIA/ 5 in 1 Card Reader	ENE CB714/1410
Audio Codec	Realtek ALC883

Keyboard

Item	Specification
Keyboard controller	NS PC97541V
Total number of keypads	88-/89-key
Windows logo key	Yes
Internal & external keyboard work simultaneously	Plug USB keyboard to the USB port directly: Yes

Battery

Item	Specification
Vendor & model name	Panasonic (6cell) 2.0
	Sanyo (6cell) 2.0
	SMP (6cell) 2.0
	Panasonic (8cell) 2.4
	Sanyo (8cell) 2.4
	SMP (8cell) 2.4
Battery Type	Li-ion
Pack capacity	4000 mAH Panasonic (6cell) 2.0
	4000 mAH Sanyo (6cell) 2.0
	4000 mAH SMP (6cell) 2.0
	4800 mAH Panasonic (8cell) 2.4
	4800 mAH Sanyo (8cell) 2.4
	4800 mAH SMP (8cell) 2.4
Number of battery cell	6/8

Chapter 1 35

Battery

Item	Specification
Package configuration	3 cells in series, 2 series in parallel 4 cells in series, 2 series in parallel
Normal voltage	11.1V
Charge voltage	19.0 v

LCD 15.4" inch

Item	Specification		
Vendor & model name	AUO B154EW02-V0 (Non- Glare)		
Screen Diagonal (mm)	15.4 inches	15.4 inches	
Active Area (mm)	331.1 x 207.0	331.2x207	
Display resolution (pixels)	1280 x 800 WXGA	1280x800 WXGA	
Pixel Pitch	0.2588 0.2588	0.25875x0.25875	
Pixel Arrangement	R.G.B. Vertical Stripe	R.G.B. Vertical Stripe	
Display Mode	Normally White	Normally White	
Typical White Luminance (cd/m²) also called Brightness	200	200	
Luminance Uniformity	1.25 max.	1.4	
Contrast Ratio	400 typical	400	
Response Time (Optical Rise Time/Fall Time)msec	4/12	16	
Nominal Input Voltage VDD	+3.3V	3.3V	
Typical Power Consumption (watt)	6.0 max. (without inverter)	Total 5.6 Watt (Typ.) @ LCM circuit 1.4Watt (Typ.), Backlight 4.2 Watt (Typ.)	
Weight	525 g. typical	560 g.(Typ.) 575 g.(Max)	
Physical Size(mm)	344.0 x 222.0 x 6.1	344.0 x 222.0 x 6.5	
Electrical Interface	1 channel LVDS	1 channel LVDS	
Support Color	262,144	262,144	
Viewing Angle (degree) Horizontal: Right/Left Vertial: Upper/Lower	45/45 15/35	45/45 15/35	
Temperature Range(° C) Operating Storage (shipping)	0 to +50 -20 to +60	0 to +50 -20 to +60	

LCD Inverter

Item	Specification
Vendor & model name	Darfon/V189-301GP
Brightness conditions	N/A
Input voltage (V)	9~21

LCD Inverter

Item	Specification	
Input current (mA)	2.56 (max)	
Output voltage (V, rms)	780V (2000V for kick off)	
Output current (mA, rms)	6.5 (max)	
Output voltage frequency (k Hz)	65K Hz (max)	

AC Adaptor

Item	Specification	
Input rating	90V AC to 264V AC, 47Hz to 63Hz	
Maximum input AC current	1.7A	
Inrush current	220A@115VAC	
	220A@230VAC	
Efficiency	82% min. @115VAC input full load	

System Power Management

ACPI mode	Power Management	
Mech. Off (G3)	All devices in the system are turned off completely.	
Soft Off (G2/S5)	OS initiated shutdown. All devices in the system are turned off completely.	
Working (G0/S0)	Individual devices such as the CPU and hard disc may be power managed in this state.	
Suspend to RAM (S3)	CPU set power down VGA Suspend PCMCIA Suspend Audio Power Down Hard Disk Power Down CD-ROM Power Down	
Save to Disk (S4)	Super I/O Low Power mode Also called Hibernation Mode. System saves all system states and data onto the disc prior to power off the whole system.	

Chapter 1 37

System Utilities

BIOS Setup Utility

The BIOS Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/Output System).

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run Setup. Please also refer to Chapter 4 Troubleshooting when problem arises.

To activate the BIOS Utility, press **F2** during POST (when "Press <F2> to enter Setup" message is prompted on the bottom of screen).

Press **F2** to enter setup. The default parameter of F12 Boot Menu is set to "disabled". If you want to change boot device without entering BIOS Setup Utility, please set the parameter to "enabled".

Press <F12> during POST to enter multi-boot menu. In this menu, user can change boot device without entering BIOS SETUP Utility.

Ph Information Main	oenix TrustedCor Advanced	e(tm) Setup Uti Security	ility Boot	Exit
ATAPI Model Name: System BIOS Version: VGA BIOS Version: KBC Version: Serial Number: Asset Tag Number:	2000 MHz XXXXXXXXXX XXXXXXXX None None XXXXXXXXXX VX.XX XX-XXX XXXXXXXX XXON None TravelMate/Ext	<pre><-XXX XX-XXXX XX.XXX.XXX.XX </pre>	<-(XX) <x.xxxxxx <x< td=""><td></td></x<></x.xxxxxx 	
F1 Help ↑↓ Select Ite Esc Exit → Select Me		ange Values lect ▶ Sub-Mer		Setup Defaults Save and Exit

Navigating the BIOS Utility

There are six menu options: Information, Main, Advanced, Security, Boot, and Exit.

Follow these instructions:

To choose a menu, use the left and right arrow keys.
To choose an item, use the up and down arrow keys.
To change the value of a parameter, press F5 or F6.
A plus sign (+) indicates the item has sub-items. Press Enter to expand this item.
Press Esc while you are in any of the menu options to go to the Exit menu.
In any menu, you can load default settings by pressing F9 . You can also press F10 to save any changes made and exit the BIOS Setup Utility.

NOTE: You can change the value of a parameter if it is enclosed in square brackets. Navigation keys for a particular menu are shown on the bottom of the screen. Help for parameters are found in the Item Specific Help part of the screen. Read this carefully when making changes to parameter values. **Please note that system information is subject to different models**.

Information

The Information screen displays a summary of your computer hardware information.

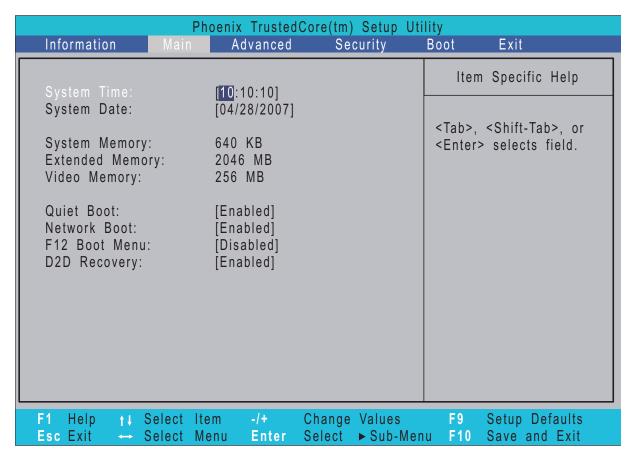
	Phoenix TrustedC	ore(tm) Setup U	Jtility	
Information Ma	ain Advanced	Security	Boot	Exit
Asset Tag Number: Product Name: Manufacturer Name: UUID:	2000 MHz XXXXXXXXX XXXXXXXXX None None XXXXXXXXX XX-XXX XX-XXX XXXXXXXX XXXXXX	XX-XXX XX-XXX (XXX.XXX.XXX.) XXXXXXXXXXXXXX Extensa 5XXX XxX-XXxx-xXXx-	<pre><x-(xx) <xx="" <xx.xxxxx="" <xx<="" pre=""></x-(xx)></pre>	«XX
F1 Help ↑↓ Select Esc Exit ↔ Select		Change Values Select ► Sub-M		Setup Defaults Save and Exit

NOTE: The system information is subject to different models.

Parameter	Description	
CPU Type	This field shows the CPU type and speed of the system.	
CPU Speed	This field shows the speed of the CPU.	
IDE0 Model Name	This field shows the model name of HDD installed on primary IDE master.	
IDE0 Serial Number	This field displays the serial number of HDD installed on primary IDE master.	
IDE1 Model Name	This field displays the model name of devices installed on secondary IDE master. The hard disk drive or optical drive model name is automatically detected by the system.	
IDE1 Serial Number	This field shows the serial number of devices installed on secondary IDE master.	
ATAPI Model Name	This field shows the model name of the Optical device installed in the system.	
System BIOS Version	Displays system BIOS version.	
VGA BIOS Version	This field displays the VGA firmware version of the system.	
KBC Ver	This field shows the keyboard	
Serial Number	This field displays the serial number of this unit.	
Asset Tag Number	This field displays the asset tag number of the system.	
Product Name	This field shows product name of the system.	
Manufacturer Name	This field displays the manufacturer of this system.	
UUID Number	Universally Unique Identifier (UUID) is an identifier standard used in software construction, standardized by the Open Software Foundation (OSF) as part of the Distributed Computing Environment (DCE).	

Main

The Main screen allows the user to set the system time and date as well as enable and disable boot option and recovery.



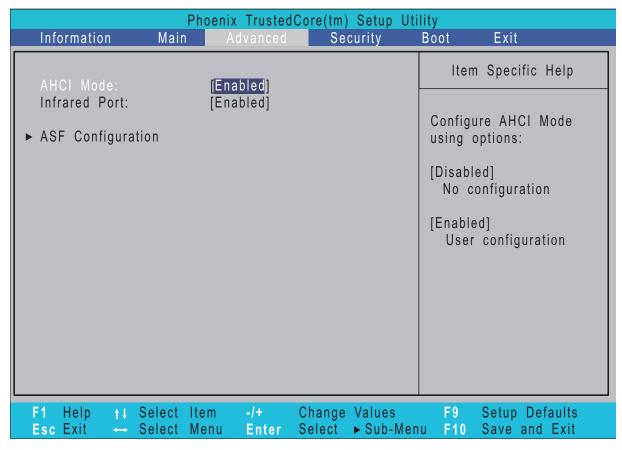
NOTE: The screen above is for your reference only. Actual values may differ.

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Format/Option	
System Time	Sets the system time. The hours are displayed with 24-hour format.	Format: HH:MM:SS (hour:minute:second) System Time	
System Date	Sets the system date.	Format MM/DD/YYYY (month/day/ year) System Date	
System Memory	This field reports the memory size of the system. Memory size is fixed to 640MB		
Extended Memory	This field reports the memory size of the extended memory in the system. Extended Memory size=Total memory size-1MB		
VGA Memory	Shows the VGA memory size. VGA Memory size=128/256 MB		
Quiet Boot	Determines if Customer Logo will be displayed or not; shows Summary Screen is disabled or enabled. Enabled: Customer Logo is displayed, and Summary Screen is disabled. Disabled: Customer Logo is not displayed, and Summary Screen is enabled.	Option: Enabled or Disabled	
Network Boot	Enables, disables the system boot from LAN (remote server).	Option: Enabled or Disabled	
F12 Boot Menu	Enables, disables Boot Menu during POST.	Option: Disabled or Enabled	
D2D Recovery	Enables, disables D2D Recovery function. The function allows the user to create a hidden partition on hard disc drive to store operation system and restore the system to factory defaults.	Option: Enabled or Disabled	

NOTE: The sub-items under each device will not be shown if the device control is set to disable or auto. This is because the user is not allowed to control the settings in these cases.

Advanced

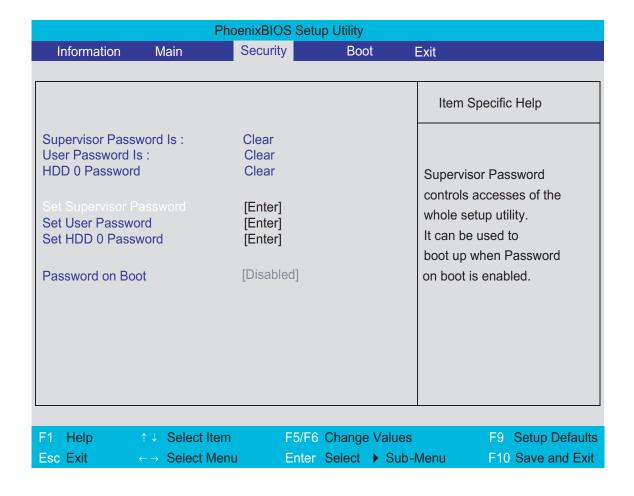


The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Format/Option
AHCI Mode	The Advanced Host Controller Interface (AHCI) is a hardware mechanism that allows software to communicate with Serial ATA devices such as SATA hard drives.	Option: Enabled or Disabled
Infrared Port	Enable or Disable the infrared port	Option: Enabled or Disabled
System Memory	This field reports the memory size of the system. Memory size is fixed to 640MB	
ASF Configuration	Configure Alert Standard Format (ASF) parameters. A standard for how alerting and remote-control capabilities on network controllers work Options: Minimum WatchDog Timeout: [] BIOS Boot Timeout: [] OS Boot Timeout: [] Power-on wait time: []	

Security

The Security screen contains parameters that help safeguard and protect your computer from unauthorized use.



NOTE: Please refer to "Remove HDD/BIOS Password" section if you need to know how to remove HDD/BIOS Password.

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Option
User Password is	Shows the setting of the user password.	Clear or Set
Supervisor Password is	Shows the setting of the Supervisor password	Clear or Set
Set User Password	Press Enter to set the user password. When user password is set, this password protects the BIOS Setup Utility from unauthorized access. The user can enter Setup menu only and does not have right to change the value of parameters.	
Set Supervisor Password	Press Enter to set the supervisor password. When set, this password protects the BIOS Setup Utility from unauthorized access. The user can not either enter the Setup menu nor change the value of parameters.	
Primary HardDisk Security	Enables or disables primary hard disk security function.	
Password on Boot	Defines whether a password is required or not while the events defined in this group happened. The following sub-options are all requires the Supervisor password for changes and should be grayed out if the user password was used to enter setup.	Disabled or Enabled

NOTE: When you are prompted to enter a password, you have three tries before the system halts. Don't forget your password. If you forget your password, you may have to return your notebook computer to your dealer to reset it.

Setting a Password

Follow these steps as you set the user or the supervisor password:

1. Use the w andy keys to highlight the Set Supervisor Password parameter and press the e key. The Set Supervisor Password box appears:

Set Supervisor Pas	sword	Ş-
Enter New Password]]
Confirm New Password]]

2. Type a password in the "Enter New Password" field. The password length can not exceeds 8 alphanumeric characters (A-Z, a-z, 0-9, not case sensitive). Retype the password in the "Confirm New Password" field.

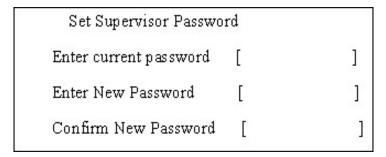
IMPORTANT: Be very careful when typing your password because the characters do not appear on the screen.

- 3. Press e.
 - After setting the password, the computer sets the User Password parameter to "Set".
- **4.** If desired, you can opt to enable the Password on boot parameter.
- 5. When you are done, press \boldsymbol{u} to save the changes and exit the BIOS Setup Utility.

Removing a Password

Follow these steps:

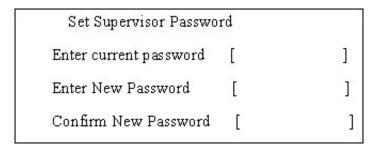
1. Use the w and y keys to highlight the Set Supervisor Password parameter and press the e key. The Set Password box appears:



- 2. Type the current password in the Enter Current Password field and press e.
- **3.** Press e twice **without** typing anything in the Enter New Password and Confirm New Password fields. The computer then sets the Supervisor Password parameter to "Clear".
- 4. When you have changed the settings, press u to save the changes and exit the BIOS Setup Utility.

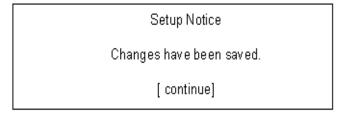
Changing a Password

1. Use the w and y keys to highlight the Set Supervisor Password parameter and press the e key. The Set Password box appears:



- 2. Type the current password in the Enter Current Password field and press e.
- 3. Type a password in the Enter New Password field. Retype the password in the Confirm New Password field.
- Press e. After setting the password, the computer sets the User Password parameter to "Set".
- 5. If desired, you can enable the Password on boot parameter.
- 6. When you are done, press u to save the changes and exit the BIOS Setup Utility.

If the verification is OK, the screen will display as following.



The password setting is complete after the user presses u.

If the current password entered does not match the actual current password, the screen will show you the Setup Warning.

Setup Warning

Invalid password

Re-enter Password

[continue]

If the new password and confirm new password strings do not match, the screen will display the following message.

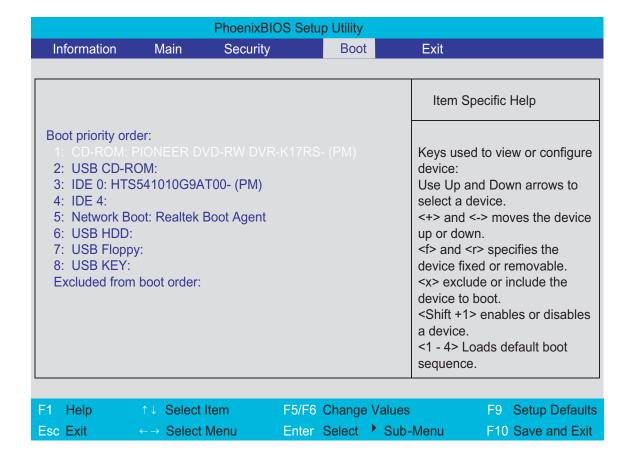
Setup Warning

Password do not match

Re-enter Password

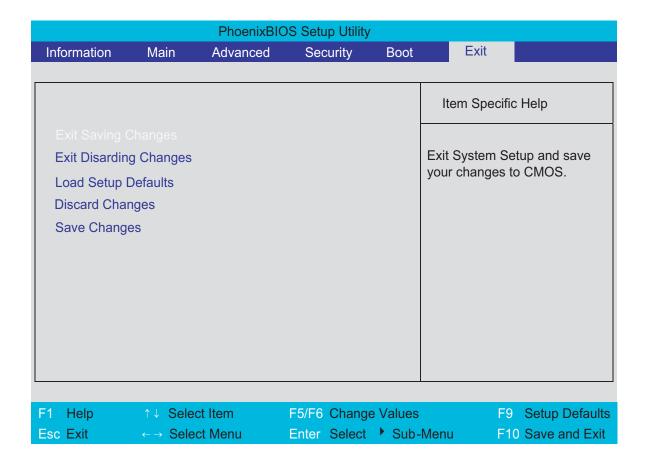
Boot

This menu allows the user to decide the order of boot devices to load the operating system. Bootable devices includes the distette drive in module bay, the onboard hard disk drive and the CD-ROM in module bay.



Exit

The Exit screen contains parameters that help safeguard and protect your computer from unauthorized use.



The table below describes the parameters in this screen.

Parameter	Description	
Exit Saving Changes	Exit System Setup and save your changes to CMOS.	
Exit Discarding Changes	Exit utility without saving setup data to CMOS.	
Load Setup Default Load default values for all SETUP item.		
Discard Changes Load previous values from CMOS for all SETUP items.		
Save Changes	Save Setup Data to CMOS.	

BIOS Flash Utility

The BIOS flash memory update is required for the following conditions:

- New versions of system programs
- New features or options
- Restore a BIOS when it becomes corrupted.

Use the Phlash utility to update the system BIOS flash ROM.

NOTE: If you do not have a crisis recovery diskette at hand, then you should create a **Crisis Recovery Diskette** before you use the Phlash utility.

NOTE: Do not install memory-related drivers (XMS, EMS, DPMI) when you use the Phlash.

NOTE: Please use the AC adaptor power supply when you run the Phlash utility. If the battery pack does not contain enough power to finish BIOS flash, you may not boot the system because the BIOS is not completely loaded.

Fellow the steps below to run the Phlash.

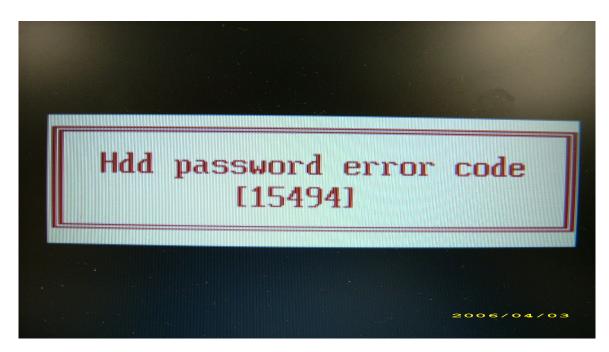
- **1.** Prepare a bootable diskette.
- 2. Copy the flash utilities to the bootable diskette.
- 3. Then boot the system from the bootable diskette. The flash utility has auto-execution function.

Remove HDD/BIOS Utility

This section provide you with removing HDD/BIOS method:

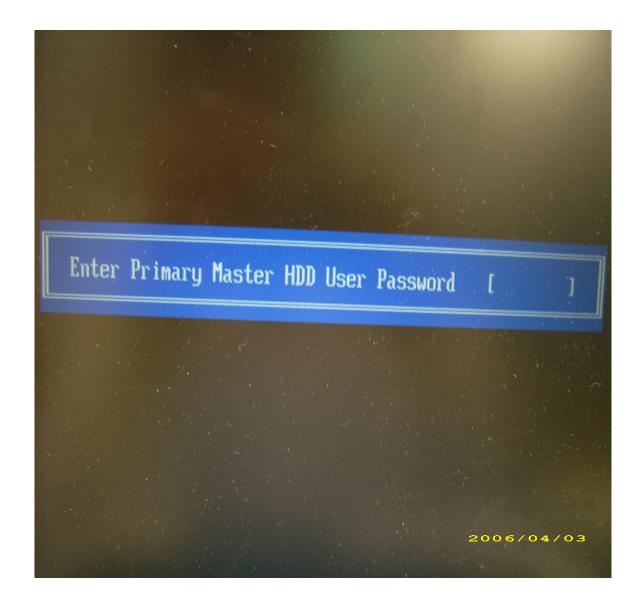
Remove HDD Password:

☐ If you key in wrong HDD password for three time, "HDD password error code" would display on the screen. See the image below.



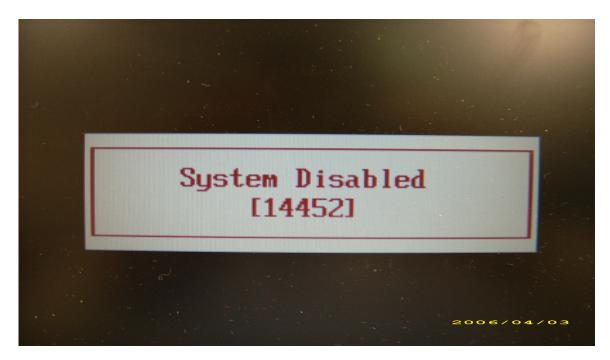
- If you need to solve HDD password locked problem, you can run HDD_PW.EXE
- **1.** Key in "hdd_pw 15494 0"
- 2. Select "2"
- 3. Choose one upper-case string

Reboot system and key in "0KJFN42" or "UVEIQ96" to HDD user password.



Remove BIOS Password:

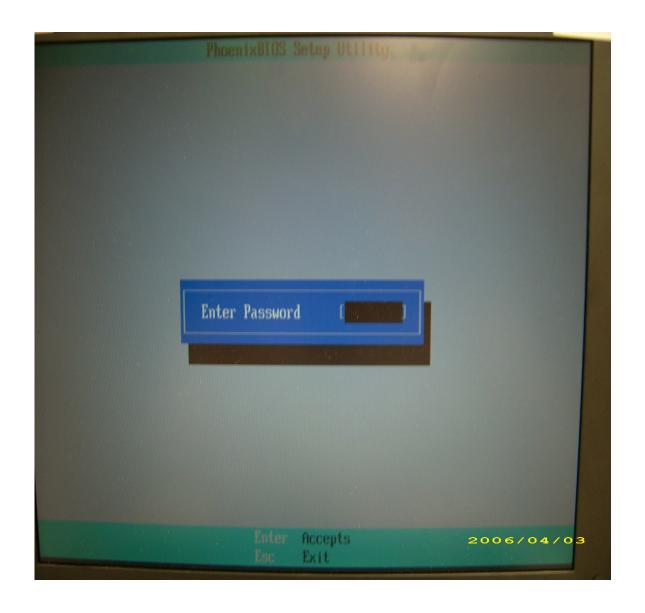
If you key in wrong Supervisor Password for three time, "System Disabled" would display on the screen. See the image below.



- ☐ If you need to solve BIOS password locked problem, you can run BIOS_PW.EXE
- **1.** Key in "bios_pw 14452 0"
- 2. Choose one upper-case string



Reboot the system and key in "qjjg9vy" or "07yqmjd" to BIOS user password.



Machine Disassembly and Replacement

This chapter contains step-by-step procedures on how to disassemble the notebook computer for maintenance and troubleshooting.

Disassembly Requirements

Plastic tweezers

To disassemble the computer, you need the following tools:

	3
	Wrist grounding strap and conductive mat for preventing electrostatic discharge
	Flat screwdriver
	Philips screwdriver
	Hex screwdriver
	Plastic flat screwdriver

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components.

Chapter 3 57

General Information

Pre-disassembly Instructions

Before proceeding with the disassembly procedure, make sure that you do the following:

- 1. Turn off the power to the system and all peripherals.
- 2. Unplug the AC adapter and all power and signal cables from the system.



- 3. Place the system on a flat, stable surface.
- 4. Remove the battery pack.

Disassembly Process

The disassembly process is divided into the following stages:

- External module disassembly
- Main unit disassembly
- LCD module disassembly

The flowcharts provided in the succeeding disassembly sections illustrate the entire disassembly sequence. Observe the order of the sequence to avoid damage to any of the hardware components. For example, if you want to remove the main board, you must first remove the keyboard, then disassemble the inside assembly frame in that order.

Main Screw List

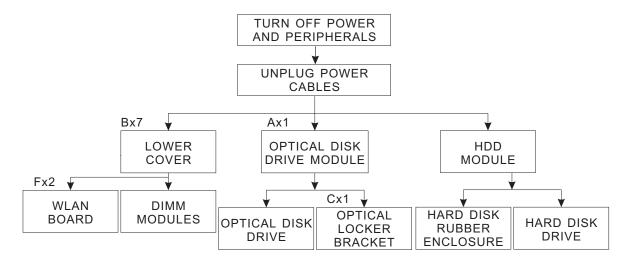
Item	Screw	Color	Part No.
Α	M2.5 x L6	Black	86.00E33.736
В	M2 x L4	Black	86.00A02.140
С	M2 x L4	Silver	86.9A552.4R0
D	M2.5 x L5	Silver	86.00E74.335
Е	M2.5 x L5	Black	86.00F87.735
F	M2 x L3	Silver	86.00C07.220
G	M2.5 x L6	Silver	86.9A544.4R0
Н	M2.5 x L8	Black	86.00E34.738

External Module Disassembly Process

External Modules Disassembly Flowchart

The flowchart below gives you a graphic representation on the entire disassembly sequence and instructs you on the components that need to be removed during servicing. For example, if you want to remove the main board, you must first remove the keyboard, then disassemble the inside assembly frame in that order.

EXTERNAL MODULE DISASSEMBLY



Screw List

	Screw	Part No.
Α	M2.5 x L6 86.00E33.736	
В	M2 x L4 86.00A02.	86.00A02.140
С	M2 x L4	86.9A552.4R0
F	M2 x L3	86.00C07.220

Chapter 3 59

Removing the Battery Pack

- 1. Turn base unit over.
- 2. Slide the battery lock/unlock latch to the unlock position (1).



3. Slide and hold the battery release latch to the release position (2), then remove the battery from the main unit (3).



Removing the SD dummy card

1. Push the SD dummy card all the way in to eject it (1, 2).



2. Pull it out from the slot (2).



Removing the PC and ExpressCard dummy cards

1. Press the eject button to pop out the button.



2. Press it again (1) to pop out the PC dummy card (2). Remove the PC dummy card from the slot.



Chapter 3 61

3. Push the ExpressCard dummy card all the way in to eject it.



4. Pull it out from the slot.



Removing the Lower Cover

- 1. See "Removing the Battery Pack" on page 60.
- **2.** See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- 4. Remove the seven screws (B) on the lower cover.



Step	Size (Quantity)	Color	Torque
1~7	M2 x L4 (7)	Black	1.6 kgf-cm

5. Use a plastic screw driver to carefully pry open the lower cover.

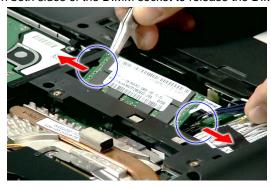


6. Remove the lower cover from the lower case.

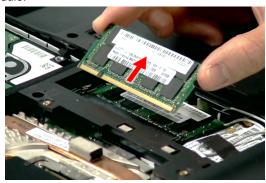


Removing the DIMM

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- **4.** See "Removing the Lower Cover" on page 62..
- 5. Push out the latches on both sides of the DIMM socket to release the DIMM.

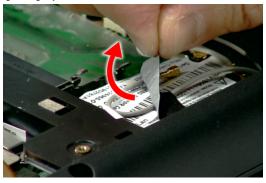


6. Remove the DIMM module.



Removing the WLAN Board Modules

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- 4. See "Removing the Lower Cover" on page 62.
- **5.** Remove the tape holding the gray antenna.



6. Disconnect the antenna cables from the WLAN board.



7. Move the antenna away from the WLAN board and remove the two screws (F) on the WLAN board to release the WLAN board.



Step	Size (Quantity)	Color	Torque
1~2	M2 x L3 (2)	Silver	1.6 kgf-cm

8. Detach the WLAN board from the WLAN socket.



NOTE: When attaching the antenna back to the WLAN board, make sure the cable are arranged properly.

Removing the Hard Disk Drive Module

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- 4. See "Removing the Lower Cover" on page 62.
- 5. Remove the foam padding as shown.



6. Disconnect the hard disk module from the connector by pulling on the mylar tab on the hard disk module.



7. Remove the hard disk module.



NOTE: To prevent damage to device, avoid pressing down on it or placing heavy objects on top of it.

8. Remove the hard disk from the hard disk rubber enclosure as shown.





Removing the Optical Drive Module

1. See "Removing the Battery Pack" on page 60..

2. Turn the base unit over, then remove the one screw (A) on the bottom side of the unit.



Step	Size (Quantity)	Color	Torque
1	M2.5 x L6 (1)	Black	3.0 kgf-cm

3. Carefully use a plastic screw driver (1) to eject the optical drive tray (2).



4. Pull the optical drive module out from the main unit.



5. Remove the one screw (C) securing the locker bracket and remove the locker bracket from the optical disk drive module.



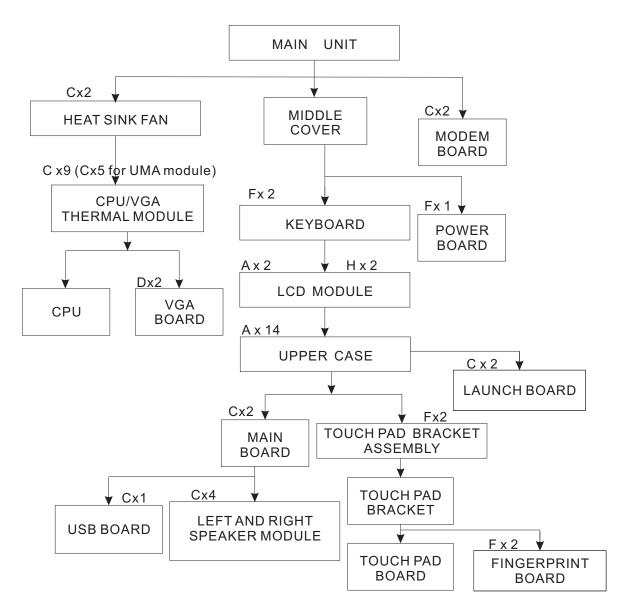


Step	Size (Quantity)	Color	Torque
1	M2 x L4 (1)	Silver	1.6 kgf-cm

Main Unit Disassembly Process

Main Unit Disassembly Flowchart

MAIN UNIT DISASSEMBLY



Screw List

	Screw	Part No.
Α	M2.5 x L6	86.00E33.736
С	M2 x L4	86.9A552.4R0
D	M2.5 x L5	86.00E74.335
F	M2 x L3	86.00C07.220
Н	M2.5 x L8	86.00E34.738

Removing the Modem Board

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.
- 3. See "Removing the DIMM" on page 63..
- 4. See "Removing the WLAN Board Modules" on page 64..
- 5. Remove the 2 screws (C) securing the modem card.



Step	Size (Quantity)	Color	Torque
1~2	M2 x L4 (2)	Silver	1.8 kgf-cm

6. Lift partially to detach the modem board from the main board.



NOTE: The modem cable is still attached to the modem board.

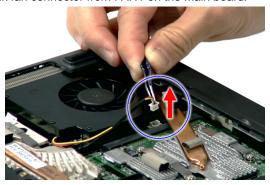
7. Disconnect the modem cable from the modem board.



Removing the Heatsink Fan Module

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.

3. Disconnect the heatsink fan connector from FAN1 on the main board.



4. Remove the two screws (C) securing the heatsink fan module.



Step	Size (Quantity)	Color	Torque
1~2	M2 x L4 (2)	Silver	1.6 kgf-cm

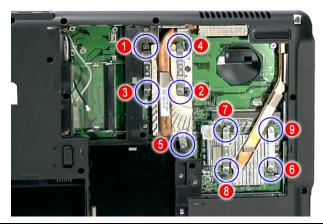
5. Remove the heatsink fan module from the main board.



Removing the CPU and VGA Heatsink Module

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.

3. Remove the nine screws (C) securing the CPU and VGA heatsink module in place.

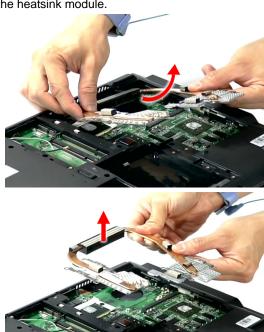


Step	Size (Quantity)	Color	Torque
1~9	M2 x L4 (9)	Silver	3.0 kgf-cm

NOTE: There are only five (5) screws for the UMA module.



4. Slide out and remove the heatsink module.



Removing the CPU

- 1. See "Removing the Battery Pack" on page 60..
- 2. See "Removing the Lower Cover" on page 62..
- 3. See "Removing the Heatsink Fan Module" on page 70.
- 4. See "Removing the CPU and VGA Heatsink Module" on page 71.
- 5. Using a flat screwdriver, turn the CPU socket latch counter-clockwise to release the CPU, then remove the CPU.





NOTE: When installing the CPU, make sure to install the CPU with PIN 1 at the corner as shown.



Removing the VGA board (for Discrete model only)

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.
- 3. See "Removing the Heatsink Fan Module" on page 70.
- 4. See "Removing the CPU and VGA Heatsink Module" on page 71.

5. Remove the two screws (D) securing the VGA board.



Step	Size (Quantity)	Color	Torque
1~2	M2.5 x L5 (2)	Silver	1.6 kgf-cm

6. Carefully remove the VGA board from the main board.

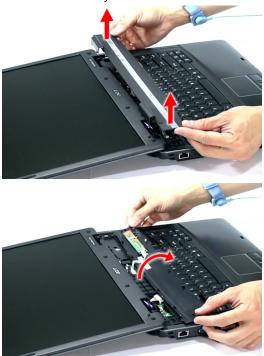


Removing the Middle Cover and the Power Board

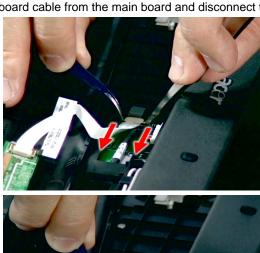
- 1. See "Removing the Battery Pack" on page 60.
- 2. Open the LCD screen all the way to facilitate the easy removal of the middle cover.
- 3. To remove the Middle Cover, carefully insert the plastic flat screwdriver under the side of the middle cover and gently pry up the middle cover. Continue prying on the other side until you could detach the Middle Cover.



4. Detach the cover and turn it over on the keyboard.



5. Disconnect the Power board cable from the main board and disconnect the Power board cable.





6. Remove the Middle Cover together with the Power board.



7. Remove the one screw (F) securing the Power board to the middle cover, and remove the Power board from the middle cover.





Step	Size (Quantity)	Color	Torque
1	M2 x L3 (1)	Silver	1.6 kgf-cm

Removing the Keyboard

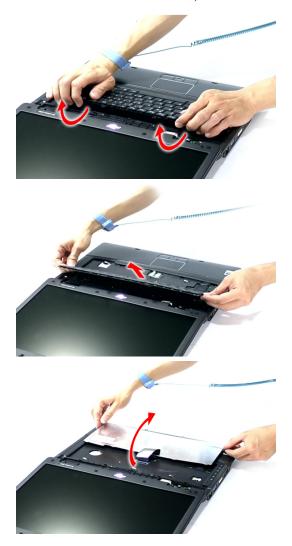
- 1. See "Removing the Battery Pack" on page 60..
- 2. See "Removing the Middle Cover and the Power Board" on page 74.

3. Remove the two screws (F) securing the keyboard to the upper case.



Step	Size (Quantity)	Color	Torque
1~2	M2 x L3 (2)	Silver	1.6 kgf-cm

4. Carefully pry the keyboard out of the latch and slide it out; then turn it over on the touchpad area.



5. Disconnect the keyboard cable from the main board to remove the keyboard.

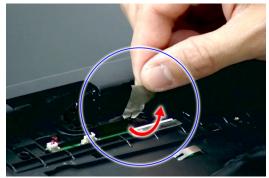




Removing the LCD Module

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.
- 3. See "Removing the WLAN Board Modules" on page 64.
- 4. See "Removing the Middle Cover and the Power Board" on page 74.
- **5.** See "Removing the Keyboard" on page 76.

6. Remove the acetic tape and disconnect the LCD coaxial cable from the LCD1 connector on the main board and release it from the latch.







7. Remove the internal microphone cable from the INTMIC1 connector on the main board.



8. Release the wireless LAN antenna cables from the hole and latches as shown.



9. Remove the two screws (A) from the base of the unit.



Step	Size (Quantity)	Color	Torque
1~2	M2.5 x L6 (2)	Black	4.0 kgf-cm

10. Remove the two screws (H) from the left and right hinge of the LCD module.



Step	Size (Quantity)	Color	Torque
1~2	M2.5 x L8 (2)	Black	4.0 kgf-cm

11. Carefully remove the LCD module from the base unit.



NOTE: When connecting the cable back to the unit, please note that the cable should be routed well.

Separating the Upper Case from the Lower Case

- 1. See "Removing the Battery Pack" on page 60.
- See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- 4. See "Removing the Lower Cover" on page 62.
- 5. See "Removing the DIMM" on page 63.
- 6. See "Removing the WLAN Board Modules" on page 64.
- 7. See "Removing the Hard Disk Drive Module" on page 65.
- 8. See "Removing the Optical Drive Module" on page 66.
- 9. See "Removing the Modem Board" on page 70.
- 10. See "Removing the Heatsink Fan Module" on page 70.
- 11. See "Removing the CPU and VGA Heatsink Module" on page 71.
- 12. See "Removing the CPU" on page 73.
- 13. See "Removing the VGA board (for Discrete model only)" on page 73.
- 14. See "Removing the Middle Cover and the Power Board" on page 74.
- **15.** See "Removing the Keyboard" on page 76.
- 16. See "Removing the LCD Module" on page 78.
- 17. Disconnect the cover switch cable from LID1 on the main board.



18. Disconnect the DC in cable from the main board.

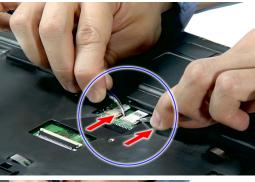


19. Disconnect the Launch board cable from the SWITCHCN1 from the main board.





20. Disconnect the fingerprint cable (select model only) from the FPCN1 connector on the main board.



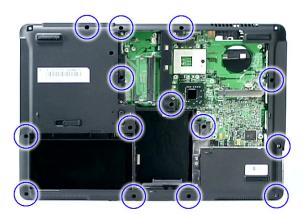


21. Disconnect the touchpad cable from the TOUCHPAD1 on the main board.





22. Remove the fourteen screws (A) on the bottom panel.



Step	Size (Quantity)	Color	Torque
1~14	M2.5 x L6 (14)	Black	3.0 kgf-cm

23. Gently raise the upper case from the main unit.



Removing the Launch Board

- 1. See "Removing the Battery Pack" on page 60.
- See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- 4. See "Removing the Lower Cover" on page 62.
- 5. See "Removing the DIMM" on page 63.
- 6. See "Removing the WLAN Board Modules" on page 64.
- 7. See "Removing the Hard Disk Drive Module" on page 65.
- 8. See "Removing the Optical Drive Module" on page 66.
- 9. See "Removing the Modem Board" on page 70.
- 10. See "Removing the Heatsink Fan Module" on page 70.
- 11. See "Removing the CPU and VGA Heatsink Module" on page 71.
- 12. See "Removing the CPU" on page 73.
- 13. See "Removing the VGA board (for Discrete model only)" on page 73.
- 14. See "Removing the Middle Cover and the Power Board" on page 74.
- 15. See "Removing the Keyboard" on page 76.
- 16. See "Removing the LCD Module" on page 78.
- 17. See "Separating the Upper Case from the Lower Case" on page 81.
- 18. Release the latch and remove the launch board cable from the launch board.





19. Remove the one screw (F) holding the launch board and remove the launch board from the upper cover.





Step	Size (Quantity)	Color	Torque
1	M2 x L3 (1)	Silver	1.6 kgf-cm

Removing the Touch Pad Board Module

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- 4. See "Removing the Lower Cover" on page 62.
- 5. See "Removing the DIMM" on page 63.
- 6. See "Removing the WLAN Board Modules" on page 64.
- 7. See "Removing the Hard Disk Drive Module" on page 65.
- **8.** See "Removing the Optical Drive Module" on page 66.
- 9. See "Removing the Modem Board" on page 70.
- 10. See "Removing the Heatsink Fan Module" on page 70.
- 11. See "Removing the CPU and VGA Heatsink Module" on page 71.
- 12. See "Removing the CPU" on page 73.
- **13.** See "Removing the VGA board (for Discrete model only)" on page 73.
- 14. See "Removing the Middle Cover and the Power Board" on page 74.
- 15. See "Removing the Keyboard" on page 76.
- 16. See "Removing the LCD Module" on page 78.
- 17. See "Separating the Upper Case from the Lower Case" on page 81.

18. Remove the fingerprint cable from the fingerprint board.





19. Remove the touch pad cable from the touch pad board.





20. Remove the two screws (F) on the touch pad bracket and remove the touch pad bracket from the upper case.





	Step	Size (Quantity)	Color	Torque
1~2		M2 x L3 (2)	Silver	1.6 kgf-cm

21. Remove the two screws (F) from the fingerprint board.



Ī	Step	Size (Quantity)	Color	Torque
	1~2	M2 x L3 (2)	Silver	1.6 kgf-cm

22. Remove the fingerprint board from the upper case.



23. Carefully pry loose and remove the touch pad board.



WARNING: The touchpad board is glued to the upper case, only remove the touchpad board if it is defective.

Removing the main board

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- 4. See "Removing the Lower Cover" on page 62.
- 5. See "Removing the DIMM" on page 63.
- 6. See "Removing the WLAN Board Modules" on page 64.
- 7. See "Removing the Hard Disk Drive Module" on page 65.
- 8. See "Removing the Optical Drive Module" on page 66.
- 9. See "Removing the Modem Board" on page 70.
- **10.** See "Removing the Heatsink Fan Module" on page 70.
- 11. See "Removing the CPU and VGA Heatsink Module" on page 71.
- 12. See "Removing the CPU" on page 73.
- 13. See "Removing the VGA board (for Discrete model only)" on page 73.
- 14. See "Removing the Middle Cover and the Power Board" on page 74.
- 15. See "Removing the Keyboard" on page 76.
- 16. See "Removing the LCD Module" on page 78.
- **17.** See "Separating the Upper Case from the Lower Case" on page 81.
- 18. Disconnect the Bluetooth cable from the BLUE1 connector on the main board.



19. Disconnect the speaker cable from the SPKR1 on the main board.



20. Remove the two screws (C) holding the main board.



Step	Size (Quantity)	Color	Torque
1~2	M2 x L4 (2)	Silver	1.6 kgf-cm

21. Carefully detach the main board and turn it over to access the USB board cable.

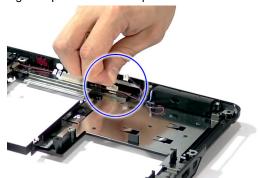


22. Detach the USB board cable from the USBCN1 on the main board.



Removing the Speaker Modules

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- 4. See "Removing the Lower Cover" on page 62.
- 5. See "Removing the DIMM" on page 63.
- 6. See "Removing the WLAN Board Modules" on page 64.
- 7. See "Removing the Hard Disk Drive Module" on page 65.
- 8. See "Removing the Optical Drive Module" on page 66.
- 9. See "Removing the Modem Board" on page 70.
- 10. See "Removing the Heatsink Fan Module" on page 70.
- 11. See "Removing the CPU and VGA Heatsink Module" on page 71.
- 12. See "Removing the CPU" on page 73.
- 13. See "Removing the VGA board (for Discrete model only)" on page 73.
- 14. See "Removing the Middle Cover and the Power Board" on page 74.
- 15. See "Removing the Keyboard" on page 76.
- 16. See "Removing the LCD Module" on page 78.
- 17. See "Separating the Upper Case from the Lower Case" on page 81.
- 18. See "Removing the main board" on page 88.
- 19. Remove the tape securing the speaker cables in place.



20. Release the speaker cables from the latches.



21. Remove the four screws (C) holding the left and right speakers.



	Step	Size (Quantity)	Color	Torque
1~	-4	M2 x L4 (4)	Silver	1.6 kgf-cm

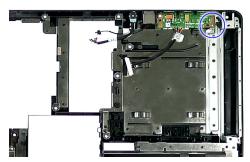
22. Remove the left and right speakers from the upper case.



Removing the USB Board

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the SD dummy card" on page 60.
- 3. See "Removing the PC and ExpressCard dummy cards" on page 61.
- 4. See "Removing the Lower Cover" on page 62.
- 5. See "Removing the DIMM" on page 63.
- 6. See "Removing the WLAN Board Modules" on page 64.
- 7. See "Removing the Hard Disk Drive Module" on page 65.
- 8. See "Removing the Optical Drive Module" on page 66.
- 9. See "Removing the Modem Board" on page 70.
- 10. See "Removing the Heatsink Fan Module" on page 70.
- 11. See "Removing the CPU and VGA Heatsink Module" on page 71.
- 12. See "Removing the CPU" on page 73.
- 13. See "Removing the VGA board (for Discrete model only)" on page 73.
- 14. See "Removing the Middle Cover and the Power Board" on page 74.
- 15. See "Removing the Keyboard" on page 76.
- 16. See "Removing the LCD Module" on page 78.
- 17. See "Separating the Upper Case from the Lower Case" on page 81.
- 18. See "Removing the main board" on page 88.

19. Remove the one screw (C) securing the USB board to the lower case.



Step	Size (Quantity)	Color	Torque
1	M2 x L4 (1)	Silver	1.6 kgf-cm

20. Partially lift the USB Board from the lower case.



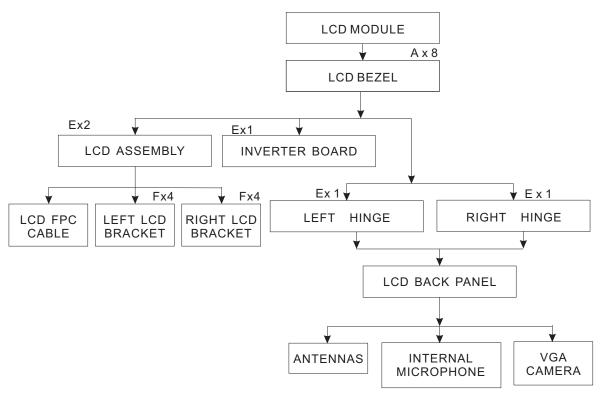
21. Detach the cable from the USB board.



LCD Module Disassembly Process

LCD Module Disassembly Flowchart

LCD MODULE DISASSEMBLY



Main Screw List

Item	Screw	Part No.
Α	M2.5 x L6	86.00E33.736
E	M2.5 x L5	86.00F87.735
F	M2 x L3	86.00C07.220

Removing the LCD Bezel

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.
- 3. See "Removing the DIMM" on page 63.
- 4. See "Removing the WLAN Board Modules" on page 64.
- 5. See "Removing the Middle Cover and the Power Board" on page 74.
- 6. See "Removing the Keyboard" on page 76.
- 7. See "Removing the LCD Module" on page 78.
- 8. Remove the four upper bezel screw caps and the four lower bezel caps.



9. Remove the eight screws (A) on the LCD module in the order as shown.



Step	Size (Quantity)	Color	Torque
1~8	M2.5 x L6 (8)	Black	3.0 kgf-cm

10. Carefully pry open the LCD bezel and remove the bezel from the LCD module.





Removing the LCD module with the Brackets

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.
- 3. See "Removing the DIMM" on page 63.
- 4. See "Removing the WLAN Board Modules" on page 64.
- 5. See "Removing the Middle Cover and the Power Board" on page 74.
- 6. See "Removing the Keyboard" on page 76.
- 7. See "Removing the LCD Module" on page 78.
- 8. See "Removing the LCD Bezel" on page 94.
- 9. Disconnect the cable from the camera board.



10. Remove the three screws (E) securing the LCD module and the Inverter panel.



	Step	Size (Quantity)	Color	Torque
1-	~3	M2.5 x L5 (3)	Silver	2.5 kgf-cm

11. Detach the LCD with the brackets from the back cover.

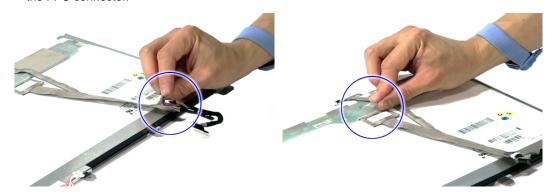


Removing the Inverter Board and FPC Cable

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.
- 3. See "Removing the DIMM" on page 63.
- 4. See "Removing the WLAN Board Modules" on page 64.
- 5. See "Removing the Middle Cover and the Power Board" on page 74.
- 6. See "Removing the Keyboard" on page 76.
- 7. See "Removing the LCD Module" on page 78.
- 8. See "Removing the LCD Bezel" on page 94.
- 9. See "Removing the LCD module with the Brackets" on page 95.
- **10.** Disconnect the inverter board cable from its connector, then disconnect the 2P cable on the inverter board to remove it.



11. Detach the acetic tapes holding the FPC cable from the LCD panel and detach the acetic tape securing the FPC connector.



12. Disconnect the FPC cable from the LCD panel.



Removing the LCD Brackets

- 1. See "Removing the Battery Pack" on page 60.
- See "Removing the Lower Cover" on page 62.
- 3. See "Removing the DIMM" on page 63.
- 4. See "Removing the WLAN Board Modules" on page 64.
- 5. See "Removing the Middle Cover and the Power Board" on page 74.
- 6. See "Removing the Keyboard" on page 76.
- 7. See "Removing the LCD Module" on page 78.
- 8. See "Removing the LCD Bezel" on page 94.
- 9. See "Removing the LCD module with the Brackets" on page 95.
- 10. See "Removing the Inverter Board and FPC Cable" on page 96.
- 11. Remove the eight screws (F) securing the left and right LCD brackets to remove the brackets.



Step	Size (Quantity)	Color	Torque
1~8	M2 x L3 (8)	Silver	1.6 kgf-cm

Removing the Left and Right Hinge

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.
- 3. See "Removing the DIMM" on page 63.
- 4. See "Removing the WLAN Board Modules" on page 64.
- 5. See "Removing the Middle Cover and the Power Board" on page 74.
- 6. See "Removing the Keyboard" on page 76.
- 7. See "Removing the LCD Module" on page 78.
- 8. See "Removing the LCD Bezel" on page 94.
- 9. See "Removing the LCD module with the Brackets" on page 95.

10. Remove the two screws (E) securing the left and right hinge to the back cover.



Step	Size (Quantity)	Color	Torque
1~2	M2.5 x L5 (2)	Silver	2.5 kgf-cm

11. Remove the left and right hinge from the back cover.



Removing the Antennas

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.
- 3. See "Removing the DIMM" on page 63.
- 4. See "Removing the WLAN Board Modules" on page 64.
- 5. See "Removing the Middle Cover and the Power Board" on page 74.
- 6. See "Removing the Keyboard" on page 76.
- 7. See "Removing the LCD Module" on page 78.
- 8. See "Removing the LCD Bezel" on page 94.
- 9. See "Removing the LCD module with the Brackets" on page 95.
- **10.** See "Removing the Left and Right Hinge" on page 97.
- 11. Release the antenna cables from the latches.



12. Remove the tapes together with the antenna cables from the back cover.





Removing the Internal Microphone and Web Camera

- 1. See "Removing the Battery Pack" on page 60.
- 2. See "Removing the Lower Cover" on page 62.
- 3. See "Removing the DIMM" on page 63.
- 4. See "Removing the WLAN Board Modules" on page 64.
- 5. See "Removing the Middle Cover and the Power Board" on page 74.
- 6. See "Removing the Keyboard" on page 76.
- 7. See "Removing the LCD Module" on page 78.
- 8. See "Removing the LCD Bezel" on page 94.
- 9. See "Removing the LCD module with the Brackets" on page 95.
- 10. See "Removing the Left and Right Hinge" on page 97.
- 11. See "Removing the Antennas" on page 98.
- 12. Release the internal microphone cable from the back cover.



13. Remove the tape holding the internal microphone in place.



Chapter 3 99

14. Remove the internal microphone from the back cover.



15. Remove the Web camera from the back cover.



Troubleshooting

Use the following procedure as a guide for computer problems.

NOTE: The diagnostic tests are intended to test only Acer products. Non-Acer products, prototype cards, or modified options can give false errors and invalid system responses.

- 1. Obtain the failing symptoms in as much detail as possible.
- 2. Verify the symptoms by attempting to re-create the failure by running the diagnostic test or by repeating the same operation.
- 3. Use the following table with the verified symptom to determine which page to go to.

Symptoms (Verified)	Go To
Power failure. (The power indicator does not go on or stay on.)	"Power System Check" on page 103.
POST does not complete. No beep or error codes are indicated.	"Power-On Self-Test (POST) Error Message" on page 106 "Undetermined Problems" on page 120
POST detects an error and displayed messages on screen.	"Error Message List" on page 107
Other symptoms (i.e. LCD display problems or others).	"Power-On Self-Test (POST) Error Message" on page 106
Symptoms cannot be re-created (intermittent problems).	Use the customer-reported symptoms and go to "Power-On Self-Test (POST) Error Message" on page 106 "Intermittent Problems" on page 119 "Undetermined Problems" on page 120

System Check Procedures

External Diskette Drive Check

Do the following to isolate the problem to a controller, driver, or diskette. A write-enabled, diagnostic diskette is required.

NOTE: Make sure that the diskette does not have more than one label attached to it. Multiple labels can cause damage to the drive or cause the drive to fail.

Do the following to select the test device.

- Boot from the diagnostics diskette and start the diagnostics program.
- 2. See if FDD Test is passed as the program runs to FDD Test.
- 3. Follow the instructions in the message window.

If an error occurs with the internal diskette drive, reconnect the diskette connector on the system board.

If the error still remains:

- 1. Reconnect the external diskette drive/DVD-ROM module.
- 2. Replace the external diskette drive/CD-ROM module.
- 3. Replace the main board.

External CD-ROM Drive Check

Do the following to isolate the problem to a controller, drive, or CD-ROM. Make sure that the CD-ROM does not have any label attached to it. The label can cause damage to the drive or can cause the drive to fail.

Do the following to select the test device:

- 1. Boot from the diagnostics diskette and start the diagnostics program.
- 2. See if CD-ROM Test is passed when the program runs to CD-ROM Test.
- 3. Follow the instructions in the message window.

If an error occurs, reconnect the connector on the System board. If the error still remains:

- 1. Reconnect the external diskette drive/CD-ROM module.
- 2. Replace the external diskette drive/CD-ROM module.
- Replace the main board.

Keyboard or Auxiliary Input Device Check

Remove the external keyboard if the internal keyboard is to be tested.

If the internal keyboard does not work or an unexpected character appears, make sure that the flexible cable extending from the keyboard is correctly seated in the connector on the system board.

If the keyboard cable connection is correct, run the Keyboard Test.

If the tests detect a keyboard problem, do the following one at a time to correct the problem. Do not replace a non-defective FRU:

- Reconnect the keyboard cables.
- Replace the keyboard.
- 3. Replace the main board.

The following auxiliary input devices are supported by this computer:

Numeric keypad

External keyboard

If any of these devices do not work, reconnect the cable connector and repeat the failing operation.

Memory check

Memory errors might stop system operations, show error messages on the screen, or hang the system.

- Boot from the diagnostics diskette and start the doagmpstotics program (please refer to main board.
- 2. Go to the diagnostic memory in the test items.
- 3. Press F2 in the test items.
- 4. Follow the instructions in the message window.

NOTE: Make sure that the DIMM is fully installed into the connector. A loose connection can cause an error.

Power System Check

To verify the symptom of the problem, power on the computer using each of the following power sources:

- 1. Remove the battery pack.
- 2. Connect the power adapter and check that power is supplied.
- 3. Disconnect the power adapter and install the charged battery pack; then check that power is supplied by the battery pack.

If you suspect a power problem, see the appropriate power supply check in the following list:

- □ "Check the Power Adapter" on page 104
- □ "Check the Battery Pack" on page 105

Check the Power Adapter

Unplug the power adapter cable from the computer and measure the output voltage at the plug of the power adapter cable. See the following figure



Pin 1: +19 to +20.5V Pin 2: 0V, Ground

- 1. If the voltage is not correct, replace the power adapter.
- 2. If the voltage is within the range, do the following:
 - Replace the System board.
 - ☐ If the problem is not corrected, see "Undetermined Problems" on page 120.
 - ☐ If the voltage is not correct, go to the next step.

NOTE: An audible noise from the power adapter does not always indicate a defect.

- **3.** If the power-on indicator does not light up, check the power cord of the power adapter for correct continuity and installation.
- **4.** If the operational charge does not work, see "Check the Battery Pack" on page 105.

Check the Battery Pack

To check the battery pack, do the following:

From Software:

- 1. Check out the Power Management in control Panel
- 2. In Power Meter, confirm that if the parameters shown in the screen for Current Power Source and Total Battery Power Remaining are correct.
- 3. Repeat the steps 1 and 2, for both battery and adapter.
- 4. This helps you identify first the problem is on recharging or discharging.

From Hardware:

- 1. Power off the computer.
- 2. Remove the battery pack and measure the voltage between battery terminals 1(+) and 6(ground).
- If the voltage is still less than 7.5 Vdc after recharging, replace the battery.

To check the battery charge operation, use a discharged battery pack or a battery pack that has less than 50% of the total power remaining when installed in the computer.

If the battery status indicator does not light up, remove the battery pack and let it return to room temperature. Re-install the battery pack.

If the charge indicator still does not light up, replace the battery pack. If the charge indicator still does not light up, replace the DC/DC charger board.

Touchpad Check

If the touchpad doesn't work, do the following actions one at a time to correct the problem. Do not replace a non-defective FRU:

- 1. Reconnect the touchpad cables.
- 2. Replace the touchpad.
- 3. Replace the system board.

After you use the touchpad, the pointer drifts on the screen for a short time. This self-acting pointer movement can occur when a slight, steady pressure is applied to the touchpad pointer. This symptom is not a hardware problem. No service actions are necessary if the pointer movement stops in a short period of time.

Power-On Self-Test (POST) Error Message

The POST error message index lists the error message and their possible causes. The most likely cause is listed first.

NOTE: Perform the FRU replacement or actions in the sequence shown in FRU/Action column, if the FRU replacement does not solve the problem, put the original part back in the computer. Do not replace a non-defective FRU.

This index can also help you determine the next possible FRU to be replaced when servicing a computer.

If the symptom is not listed, see "Undetermined Problems" on page 120.

The following lists the error messages that the BIOS displays on the screen and the error symptoms classified by function.

NOTE: Most of the error messages occur during POST. Some of them display information about a hardware device, e.g., the amount of memory installed. Others may indicate a problem with a device, such as the way it has been configured.

NOTE: If the system fails after you make changes in the BIOS Setup Utility menus, reset the computer, enter Setup and install Setup defaults or correct the error.

Index of Error Messages

Error Code List

Error Codes	Error Messages
006	Equipment Configuration Error
	Causes:
	CPU BIOS Update Code Mismatch
	IDE Primary Channel Master Drive Error
	(THe causes will be shown before "Equipment Configuration Error")
010	Memory Error at xxxx:xxxx:xxxxh (R:xxxxh, W:xxxxh)
070	Real Time Clock Error
071	CMOS Battery Bad
072	CMOS Checksum Error
110	System disabled.
	Incorrect password is specified.
<no code="" error=""></no>	Battery critical LOW
	In this situation BIOS will issue 4 short beeps then shut
	down system, no message will show.
<no code="" error=""></no>	Thermal critical High
	In this situation BIOS will shut down system, not show
	message.

Error Message List

Error Messages	FRU/Action in Sequence
Failure Fixed Disk	Reconnect hard disk drive connector.
	"Load Default Settings" in BIOS Setup Utility.
	Hard disk drive
	System board
Stuck Key	see "Keyboard or Auxiliary Input Device Check" on page 102.
Keyboard error	see "Keyboard or Auxiliary Input Device Check" on page 102.
Keyboard Controller Failed	see "Keyboard or Auxiliary Input Device Check" on page 102.
Keyboard locked - Unlock key switch	Unlock external keyboard
Monitor type does not match CMOS - Run	Run "Load Default Settings" in BIOS Setup Utility.
Setup	
Shadow RAM Failed at offset: nnnn	BIOS ROM
	System board
System RAM Failed at offset: nnnn	DIMM
	System board
Extended RAM Failed at offset: nnnn	DIMM
	System board
System battery is dead - Replace and run	Replace RTC battery and Run BIOS Setup Utility to
Setup	reconfigure system time, then reboot system.
System CMOS checksum bad - Default	RTC battery
configuration used	Run BIOS Setup Utility to reconfigure system time, then
	reboot system.

Error Message List

Error Messages	FRU/Action in Sequence
System timer error	RTC battery
	Run BIOS Setup Utility to reconfigure system time, then
	reboot system.
	System board
Real time clock error	RTC battery
	Run BIOS Setup Utility to reconfigure system time, then
	reboot system.
	System board
Previous boot incomplete - Default configuration used	Run "Load Default Settings" in BIOS Setup Utility.
Configuration used	RTC battery
	System board
Memory size found by POST differed from CMOS	Run "Load Default Settings" in BIOS Setup Utility.
CIVIOS	DIMM
	System board
Diskette drive A error	Check the drive is defined with the proper diskette type in BIOS Setup Utility
	See "External Diskette Drive Check" on page 102.
In a compact Delivio A trus a muse CETUD	
Incorrect Drive A type - run SETUP	Check the drive is defined with the proper diskette type in BIOS Setup Utility
System cache error - Cache disabled	System board
CPU ID:	System board
DMA Test Failed	DIMM
	System board
Software NMI Failed	DIMM
	System board
Fail-Safe Timer NMI Failed	DIMM
	System board
Device Address Conflict	Run "Load Default Settings" in BIOS Setup Utility.
	RTC battery
	System board
Allocation Error for device	Run "Load Default Settings" in BIOS Setup Utility.
	RTC battery
	System board
Failing Bits: nnnn	DIMM
	BIOS ROM
	System board
Fixed Disk n	None
Invalid System Configuration Data	BIOS ROM
	System board
I/O device IRQ conflict	Run "Load Default Settings" in BIOS Setup Utility.
	RTC battery
	System board
Operating system not found	Enter Setup and see if fixed disk and drive A: are properly
	identified.
	Diskette drive
	Hard disk drive
	System board

Error Message List

No beep Error Messages	FRU/Action in Sequence
No beep, power-on indicator turns off and LCD is blank.	Power source (battery pack and power adapter). See "Power
LCD is blank.	System Check" on page 103
	Ensure every connector is connected tightly and correctly.
	Reconnect the DIMM.
	LED board.
	System board.
No beep, power-on indicator turns on and LCD is blank.	Power source (battery pack and power adapter). See "Power System Check" on page 103
	Reconnect the LCD connector
	Hard disk drive
	LCD inverter ID
	LCD cable
	LCD Inverter
	LCD
	System board
No beep, power-on indicator turns on and	Reconnect the LCD connectors.
LCD is blank. But you can see POST on an external CRT.	LCD inverter ID
	LCD cable
	LCD inverter
	LCD
	System board
No beep, power-on indicator turns on and a	Ensure every connector is connected tightly and correctly.
blinking cursor shown on LCD during POST.	System board
No beep during POST but system runs	Speaker
correctly.	System board

Phoenix BIOS Beep Codes

09h Set IN POST flag 0Ah Initialize CPU registers 0Bh Enable CPU cache 0Ch Initialize caches to initial POST values 0Eh Initialize l/O component 0Fh Initialize the local bus IDE 10h Initialize Power Management 11h Load alternate registers with initial POST values 12h Restore CPU control word during warm boot 13h Initialize PCI Bus Mastering devices 14h Initialize keyboard controller 16h 1-2-2-3 BIOS ROM checksum 17h Initialize cache before memory autosize 18h 8254 timer initialization 1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM fa	Code	Beeps	POST Routine Description
04h Get CPU type 06h Initialize system hardware 08h Initialize chipset with initial POST values 09h Set IN POST flag 0Ah Initialize CPU registers 0Bh Enable CPU cache 0Ch Initialize caches to initial POST values 0Eh Initialize I/O component 0Fh Initialize Power Management 10h Initialize Power Management 11h Load alternate registers with initial POST values 12h Restore CPU control word during warm boot 13h Initialize PCI Bus Mastering devices 14h Initialize keyboard controller 16h 1-2-2-3 BIOS ROM checksum 17h Initialize cache before memory autosize 18h 8254 timer initialization 1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB Enable A20 line Enable A20 line Autosize DRAM Initia	02h		Verify Real Mode
Initialize system hardware	03h		Disable Non-Maskable Interrupt (NMI)
Initialize chipset with initial POST values	04h		Get CPU type
09h Set IN POST flag 0Ah Initialize CPU registers 0Bh Enable CPU cache 0Ch Initialize caches to initial POST values 0Eh Initialize l/O component 0Fh Initialize the local bus IDE 10h Initialize Power Management 11h Load alternate registers with initial POST values 12h Restore CPU control word during warm boot 13h Initialize PCI Bus Mastering devices 14h Initialize keyboard controller 16h 1-2-2-3 BIOS ROM checksum 17h Initialize cache before memory autosize 18h 8254 timer initialization 1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM fa	06h		Initialize system hardware
OAh Initialize CPU registers Enable CPU cache Initialize caches to initial POST values Initialize the local bus IDE Initialize Power Management Initialize Power Management Load alternate registers with initial POST values Restore CPU control word during warm boot Initialize PCI Bus Mastering devices IAh Initialize keyboard controller IBh Initialize cache before memory autosize IBh Initialize POST Memory Manager	08h		Initialize chipset with initial POST values
DBh Enable CPU cache OCh Initialize caches to initial POST values OEh Initialize I/O component OFh Initialize the local bus IDE 10h Initialize Power Management Load alternate registers with initial POST values 12h Restore CPU control word during warm boot 13h Initialize PCI Bus Mastering devices 14h Initialize keyboard controller 16h 1-2-2-3 BIOS ROM checksum 17h Initialize cache before memory autosize 18h 8254 timer initialization 1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB Enable A20 line Autosize DRAM 29h Initialize POST Memory Manager Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low bytes	09h		Set IN POST flag
OCh Initialize caches to initial POST values OEh Initialize I/O component OFh Initialize I/O component Initialize I/O component Initialize I/O component Initialize I/O component Initialize Power Management Load alternate registers with initial POST values Restore CPU control word during warm boot Initialize PCI Bus Mastering devices I4h Initialize keyboard controller I6h I-2-2-3 BIOS ROM checksum I7h Initialize cache before memory autosize 18h 8254 timer initialization IAh 8237 DMA controller initialization ICh Reset Programmable Interrupt Controller 20h I-3-1-1 Test DRAM refresh 22h I-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB Enable A20 line 28h Autosize DRAM Initialize POST Memory Manager Clear 215 KB base RAM Clear 215 KB base RAM Clear 215 KB base RAM RAM failure on address line xxxx EEh I-3-4-3 RAM failure on data bits xxxxx of low bytes	0Ah		Initialize CPU registers
OEh Initialize I/O component OFh Initialize the local bus IDE Initialize Power Management Initialize Power Management Load alternate registers with initial POST values Restore CPU control word during warm boot Initialize PCI Bus Mastering devices Initialize keyboard controller ISH Initialize keyboard controller ISH Initialize cache before memory autosize ISH September 1-2-2-3 BIOS ROM checksum Initialize cache before memory autosize ISH September 1-3-1-1 Initialization ICH Reset Programmable Interrupt Controller ISH Initialize Reyboard Controller ISH September 1-3-1-1 Initialization ICH Reset Programmable Interrupt Controller ISH Set ES segment register to 4 GB ISH Set ES segment register to 4 GB ISH Set ES Regment Register to 4 GB INITIALIZED RAM INITIALIZED	0Bh		Enable CPU cache
Initialize the local bus IDE	0Ch		Initialize caches to initial POST values
Initialize Power Management Load alternate registers with initial POST values Restore CPU control word during warm boot Initialize PCI Bus Mastering devices Initialize PCI Bus Mastering devices Initialize keyboard controller I6h I-2-2-3 BIOS ROM checksum I7h Initialize cache before memory autosize I8h 8254 timer initialization IAh 8237 DMA controller initialization ICh Reset Programmable Interrupt Controller I6h I-3-1-1 Test DRAM refresh I7-3-1-3 Test 8742 Keyboard Controller I7-3	0Eh		Initialize I/O component
12h Load alternate registers with initial POST values 12h Restore CPU control word during warm boot 13h Initialize PCI Bus Mastering devices 14h Initialize keyboard controller 16h 1-2-2-3 BIOS ROM checksum 17h Initialize cache before memory autosize 18h 8254 timer initialization 1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	0Fh		Initialize the local bus IDE
values Restore CPU control word during warm boot Initialize PCI Bus Mastering devices Initialize keyboard controller BIOS ROM checksum Initialize cache before memory autosize Initialize ache before memory autosize Initialize	10h		Initialize Power Management
boot Initialize PCI Bus Mastering devices Initialize keyboard controller Initialize keyboard controller Initialize keyboard controller Initialize cache before memory autosize Initialization Initialization	11h		Load alternate registers with initial POST values
14h Initialize keyboard controller 16h 1-2-2-3 BIOS ROM checksum 17h Initialize cache before memory autosize 18h 8254 timer initialization 1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low bytes	12h		_
16h 1-2-2-3 BIOS ROM checksum 17h Initialize cache before memory autosize 18h 8254 timer initialization 1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxxx of low byte	13h		Initialize PCI Bus Mastering devices
17h Initialize cache before memory autosize 18h 8254 timer initialization 1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	14h		Initialize keyboard controller
18h 8254 timer initialization 1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	16h	1-2-2-3	BIOS ROM checksum
1Ah 8237 DMA controller initialization 1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	17h		Initialize cache before memory autosize
1Ch Reset Programmable Interrupt Controller 20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	18h		8254 timer initialization
20h 1-3-1-1 Test DRAM refresh 22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	1Ah		8237 DMA controller initialization
22h 1-3-1-3 Test 8742 Keyboard Controller 24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	1Ch		Reset Programmable Interrupt Controller
24h Set ES segment register to 4 GB 26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	20h	1-3-1-1	Test DRAM refresh
26h Enable A20 line 28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	22h	1-3-1-3	Test 8742 Keyboard Controller
28h Autosize DRAM 29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	24h		Set ES segment register to 4 GB
29h Initialize POST Memory Manager 2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	26h		Enable A20 line
2Ah Clear 215 KB base RAM 2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	28h		Autosize DRAM
2Ch 1-3-4-1 RAM failure on address line xxxx 2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	29h		Initialize POST Memory Manager
2Eh 1-3-4-3 RAM failure on data bits xxxx of low byte	2Ah		Clear 215 KB base RAM
· ·	2Ch	1-3-4-1	RAM failure on address line xxxx
Of friethory bus	2Eh	1-3-4-3	RAM failure on data bits xxxx of low byte of memory bus
2Fh Enable cache before system BIOS shadow	2Fh		
30h 1-4-1-1 RAM failure on data bits xxxx of high byte of memory bus	30h	1-4-1-1	RAM failure on data bits xxxx of high byte of memory bus
32h Test CPU bus-clock frequency	32h		Test CPU bus-clock frequency
33h Initialize Phoenix Dispatch Manager	33h		Initialize Phoenix Dispatch Manager
36h Warm start shut down	36h		Warm start shut down
38h Shadow system BIOS ROM	38h		Shadow system BIOS ROM
3Ah Autosize cache	3Ah		Autosize cache

Advanced configuration of chipset registers 3Dh Load alternate registers with CMOS values 42h Initialize interrupt vectors 46h 2-1-2-3 Check ROM copyright notice Check video configuration against CMOS 48h Check video configuration against CMOS 48h Initialize PCI bus and devices 48h QuietBoot start (optional) 4Ch Shadow video BIOS ROM 4Eh Display BIOS copyright notice 50h Display CPU type and speed 51h Initialize BISA board 52h Test keyboard 54h Set key click if enabled 58h 2-2-3-1 Test for unexpected interrupts Initialize POST display service Display prompt "Press F2 to enter SETUP" 5Bh Disable CPU cache Test RAM between 512 and 640 KB Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 Configure advanced cache registers 67h Initialize Multi Processor APIC Enable external and CPU caches 68h Chack or Display possible high address for UMB recovery 70h Display perror messages Check for keyboard errors 72h Check for configuration of chipset with CMOS 8th proposal prompt "Press F2 To UMB) 6ch Display prompt "Press F2 To enter SETUP" 5Bh Display prompt "Press F2 to enter SETUP" 6Bh Configure advanced cache registers 6Th Initialize Multi Processor APIC Enable external and CPU caches 6Bh Coad custom defaults (optional) 6Ch Display prompt messages Check for configuration errors 7Ch Check for configuration errors Test of the corpocassor if present 1 Initialize coprocessor if present 1 Initialize or corposation errors Check for configuration errors Test of the corpocassor if present 1 Initialize coprocessor if present 1 Initialize initialize initialization	Code	Beeps	POST Routine Description
Values Initialize interrupt vectors	3Ch		
45h POST device initialization 46h 2-1-2-3 Check ROM copyright notice 48h Check video configuration against CMOS 48h Initialize PCI bus and devices 48h Initialize PCI bus and devices 48h QuietBoot start (optional) 48h QuietBoot start (optional) 48h QuietBoot start (optional) 48h QuietBoot start (optional) 48ch Shadow video BIOS ROM 48ch Display BIOS copyright notice 50h Display BIOS copyright notice 50h Display CPU type and speed 51h Initialize EISA board 52ch Test keyboard 58h Set key click if enabled 58h Set key click if enabled 58h POST display service 58h Display prompt "Press F2 to enter SETUP" 58h Disable CPU cache 58ch Test RAM between 512 and 640 KB 60h Test extended memory 62ch Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 69h Setup System Management Mode (SMM) area 6Ah Display possible high address for UMB recovery 70h Display proor messages 72h Check for configuration errors 76h Check for keyboard errors 76ch Set up hardware interrupt vectors 76ch Initialize CPIC cannel 6Bob Check for keyboard errors 76ch Display error messages 10 Display error messages 10 Check for keyboard errors 10 Display error messages 10 Check for keyboard errors 10 Display error messages 10 Check for keyboard errors 10 Display error messages 10 Check for keyboard errors 10 Display error messages 10 Check for keyboard errors 10 Display error messages 10 Display error messages 10 Check for configuration errors 10 Check for keyboard errors 10 Display error messages 10 Check for configuration errors 10 Check for keyboard errors 10 Display error messages 11 Display error messages 12 Check for configuration errors 12 Check for keyboard errors 13 Display error messages 14 Display error messages 15 Display error messages 16 Display error messages 17 Display error messages 17 Display error messages 18 Display error messages 18 Display error messages 18 Display error messa	3Dh		
46h 2-1-2-3 Check ROM copyright notice 48h Check video configuration against CMOS 49h Initialize PCI bus and devices 4Ah Initialize all video adapters in system 4Bh QuietBoot start (optional) 4Ch Shadow video BIOS ROM 4Eh Display BIOS copyright notice 50h Display CPU type and speed 51h Initialize EISA board 52h Test keyboard 54h Set key click if enabled 58h 2-2-3-1 1 fest for unexpected interrupts 59h Initialize POST display service 58h Display prompt "Press F2 to enter 5ETUP" 5Bh Display prompt "Press F2 to enter 5Ch Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup S	42h		Initialize interrupt vectors
48h Check video configuration against CMOS 49h Initialize PCI bus and devices 4Ah Initialize All video adapters in system 4Bh QuietBoot start (optional) 4Ch Shadow video BIOS ROM 4Eh Display BIOS copyright notice 50h Display CPU type and speed 51h Initialize EISA board 52h Test keyboard 54h Set key click if enabled 58h 2-2-3-1 Test for unexpected interrupts 59h Initialize POST display service 5Ah Display prompt "Press F2 to enter SETUP" 5Bh Disable CPU cache 5Ch Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory 62h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display possible high address for UMB recovery 70h Display person reressage 6Eh Display prompt spessed 6Ch Configure management Mode (SMM) area 6Ah Display prospit leigh address for UMB recovery 70h Display prompt speent	45h		POST device initialization
A9h Initialize PCI bus and devices AAh QuietBoot start (optional) ACh Shadow video BIOS ROM AEh Display BIOS copyright notice Soh Display CPU type and speed Initialize EISA board Set key click if enabled Set if enabled in interrupts Initialize POST display service Set UPs of the provided in interrupts Set Initialize POST display service Set Initialize POST display service Set if enabled memory and interrupts Set if enabled memory Set enable externed amony Set if enabled interrupts Set if enabled interru	46h	2-1-2-3	Check ROM copyright notice
AAh QuietBoot start (optional) 4Ch Shadow video BIOS ROM 4Eh Display BIOS copyright notice 50h Display BIOS copyright notice 50h Display BIOS copyright notice 51h Initialize EISA board 52h Set key click if enabled 58h 2-2-3-1 Test for unexpected interrupts 59h Initialize POST display service 5Ah Display prompt "Press F2 to enter SETUP" 58h Disable CPU cache 5Ch Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU cache 69h Setup System Management Mode (SMM) area 6Ah Display shadow-area message 6Eh Display possible high address for UMB recovery 70h Display peror messages 72h Check for configuration errors 76h Initialize coprocessor if present Notation of the present of the present Notation of the present of	48h		Check video configuration against CMOS
ABh QuietBoot start (optional) 4Ch Shadow video BIOS ROM 4Eh Display BIOS copyright notice 50h Display BIOS copyright notice 50h Display BIOS copyright notice 50h Display CPU type and speed 51h Initialize EISA board 52h Test keyboard 54h Set key click if enabled 58h 2-2-3-1 Test for unexpected interrupts 59h Initialize POST display service 5Ah Display prompt "Press F2 to enter SETUP" 58h Disable CPU cache 56ch Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display possible high address for UMB recovery 70h Display peror messages 72h Check for configuration errors 76h Check for configuration errors 76h Check for keyboard errors 76h Initialize coprocessor if present 80h Display long of the present 10 Jisplay por messages 10 Jisplay error messages	49h		Initialize PCI bus and devices
4Ch Shadow video BIOS ROM 4Eh Display BIOS copyright notice 50h Display BIOS copyright notice 50h Display CPU type and speed 51h Initialize EISA board 52h Test keyboard 54h Set key click if enabled 58h 2-2-3-1 Test for unexpected interrupts 59h Initialize POST display service 58h Display prompt "Press F2 to enter SETUP" 58h Disable CPU cache 56h Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 66h Display shadow-area message 6Eh Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 76h Check for keyboard errors 76h Display intribute on bisplay interpretation errors 76h Display intribute or intribute or intialize coprocessor if present 80h Display nardware interrupt vectors 76h Display hardware interrupt vectors 76h Display hardware interrupt vectors 76h Display hardware interrupt vectors 76h Display on board Super I/O ports and IRQs	4Ah		Initialize all video adapters in system
4Eh Display BIOS copyright notice 50h Display CPU type and speed 51h Initialize EISA board 52h Test keyboard 54h Set key click if enabled 58h 2-2-3-1 Test for unexpected interrupts 59h Initialize POST display service 5Ah Display prompt "Press F2 to enter SETUP" 5Bh Disable CPU cache 5Ch Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display possible high address for UMB recovery 70h Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors <	4Bh		QuietBoot start (optional)
Display CPU type and speed	4Ch		Shadow video BIOS ROM
51h Initialize EISA board 52h Test keyboard 54h Set key click if enabled 58h 2-2-3-1 Test for unexpected interrupts 59h Initialize POST display service 5Ah Display prompt "Press F2 to enter SETUP" 5Bh Disable CPU cache 5Ch Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 76h Initialize coprocessor if present 80h Displaye I/O ports and IRQs	4Eh		Display BIOS copyright notice
Test keyboard Set key click if enabled Set key click if enabled Test for unexpected interrupts Initialize POST display service Display prompt "Press F2 to enter SETUP" SBh Disable CPU cache Test RAM between 512 and 640 KB Test extended memory Test extended memory address lines Jump to User Patch1 Configure advanced cache registers Initialize Multi Processor APIC Set by System Management Mode (SMM) area Setup System Management Mode (SMM) area Setup System defaults (optional) Coh Display possible high address for UMB recovery Test extended memory address lines Display prompt "Press F2 to enter SETUP" Test extended memory Test extended memory Test extended memory Test extended memory address lines All Dispressor APIC Test extended memory address lines Display stadowacd cache registers Enable external and CPU caches Setup System Management Mode (SMM) area Display external L2 cache size Load custom defaults (optional) Check Check for configuration errors Test Check for configuration errors Test Test Initialize coprocessor if present Disable onboard Super I/O ports and IRQs	50h		Display CPU type and speed
Set key click if enabled 58h 2-2-3-1 Test for unexpected interrupts 59h Initialize POST display service 5Ah Display prompt "Press F2 to enter SETUP" 5Bh Disable CPU cache 5Ch Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 76h Check for keyboard errors 76h Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	51h		Initialize EISA board
58h 2-2-3-1 Test for unexpected interrupts 59h Initialize POST display service 5Ah Display prompt "Press F2 to enter SETUP" 5Bh Disable CPU cache 5Ch Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	52h		Test keyboard
S9h Initialize POST display service 5Ah Display prompt "Press F2 to enter SETUP" 5Bh Disable CPU cache 5Ch Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 76h Initialize coprocessor if present 80h Display on Jump to User Patch 1 80h Display error messages 10h Jump to User Patch 1 80h Display error messages 10h Jump to User Patch 1 10h Jump to User Patc	54h		Set key click if enabled
Display prompt "Press F2 to enter SETUP" 5Bh Disable CPU cache Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 76h Initialize coprocessor if present 80h Dispable onboard Super I/O ports and IRQs	58h	2-2-3-1	Test for unexpected interrupts
SETUP" 5Bh Disable CPU cache Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display shadow-area message 6Eh Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 76h Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	59h		Initialize POST display service
Test RAM between 512 and 640 KB 60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 76h Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Dispale onboard Super I/O ports and IRQs	5Ah		
60h Test extended memory 62h Test extended memory address lines 64h Jump to User Patch1 66h Configure advanced cache registers 67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display shadow-area message 6Eh Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 77h Set up hardware interrupt vectors 78h Initialize coprocessor if present 80h Dispale onboard Super I/O ports and IRQs	5Bh		Disable CPU cache
Test extended memory address lines Jump to User Patch1 Configure advanced cache registers Initialize Multi Processor APIC Enable external and CPU caches Setup System Management Mode (SMM) area Display external L2 cache size Load custom defaults (optional) Che Display possible high address for UMB recovery Display error messages Check for configuration errors Check for keyboard errors Check for keyboard errors Teh Disable onboard Super I/O ports and IRQs	5Ch		Test RAM between 512 and 640 KB
Jump to User Patch1	60h		Test extended memory
Configure advanced cache registers Initialize Multi Processor APIC Initialize Multi Processor APIC Enable external and CPU caches Setup System Management Mode (SMM) area 6Ah Display external L2 cache size Load custom defaults (optional) Ch Display shadow-area message Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 76h Set up hardware interrupt vectors 76h Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	62h		Test extended memory address lines
67h Initialize Multi Processor APIC 68h Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display shadow-area message 6Eh Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	64h		Jump to User Patch1
Enable external and CPU caches 69h Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display shadow-area message 6Eh Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	66h		Configure advanced cache registers
Setup System Management Mode (SMM) area 6Ah Display external L2 cache size 6Bh Load custom defaults (optional) 6Ch Display shadow-area message 6Eh Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	67h		Initialize Multi Processor APIC
area Display external L2 cache size Bh Load custom defaults (optional) Ch Display shadow-area message Display possible high address for UMB recovery Display error messages Check for configuration errors Check for keyboard errors Check for keyboard errors Check for keyboard errors Initialize coprocessor if present Disable onboard Super I/O ports and IRQs	68h		Enable external and CPU caches
6Bh Load custom defaults (optional) 6Ch Display shadow-area message 6Eh Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	69h		
6Ch Display shadow-area message Display possible high address for UMB recovery Display error messages Check for configuration errors Check for keyboard errors Check for keyboard errors Check for keyboard errors Initialize coprocessor if present Disable onboard Super I/O ports and IRQs	6Ah		Display external L2 cache size
6Eh Display possible high address for UMB recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	6Bh		Load custom defaults (optional)
recovery 70h Display error messages 72h Check for configuration errors 76h Check for keyboard errors 7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	6Ch		Display shadow-area message
72h Check for configuration errors 76h Check for keyboard errors 7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	6Eh		
76h Check for keyboard errors 7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	70h		Display error messages
7Ch Set up hardware interrupt vectors 7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	72h		Check for configuration errors
7Eh Initialize coprocessor if present 80h Disable onboard Super I/O ports and IRQs	76h		Check for keyboard errors
80h Disable onboard Super I/O ports and IRQs	7Ch		Set up hardware interrupt vectors
IRQs	7Eh		Initialize coprocessor if present
81h Late POST device initialization	80h		
	81h		Late POST device initialization

Code	Beeps	POST Routine Description
82h		Detect and install external RS232 ports
83h		Configure non-MCD IDE controllers
84h		Detect and install external parallel ports
85h		Initialize PC-compatible PnP ISA devices
86h		Re-initialize onboard I/O ports
87h		Configure Motherboard Configurable Devices (optional)
88h		Initialize BIOS Area
89h		Enable Non-Maskable Interrupts (NMIs)
8Ah		Initialize Extended BIOS Data Area
8Bh		Test and initialize PS/2 mouse
8Ch		Initialize floppy controller
8Fh		Determine number of ATA drives (optional)
90h		Initialize hard-disk controllers
91h		Initialize local-bus hard-disk controllers
92h		Jump to UserPatch2
93h		Build MPTABLE for multi-processor boards
95h		Install CD ROM for boot
96h		Clear huge ES segment register
97h		Fixup Multi Processor table
98h	1-2	Search for option ROMs. One long, two short beeps on checksum failure.
99h		Check for SMART drive (optional)
9Ah		Shadow option ROMs
9Ch		Set up Power Management
9Dh		Initialize security engine (optional)
9Eh		Enable hardware interrupts
9Fh		Determine number of ATA and SCSI drives
A0h		Set time of day
A2h		Check key lock
A4h		Initialize Typematic rate
A8h		Erase F2 prompt
AAh		Scan for F2 key stroke
ACh		Enter SETUP
AEh		Clear Boot flag
B0h		Check for errors
B2h		POST done- prepare to boot operating system
B4h	1	One short beep before boot
B5h		Terminate QuietBoot (optional)
B6h	+	Check password (optional)

Code	Beeps	POST Routine Description
B9h		Prepare Boot
BAh		Initialize DMI parameters
BBh		Initialize PnP Option ROMs
BCh		Clear parity checkers
BDh		Display MultiBoot menu
BEh		Clear screen (optional)
BFh		Check virus and backup reminders
C0h		Try to boot with INT 19
C1h		Initialize POST Error Manager (PEM)
C2h		Initialize error logging
C3h		Initialize error display function
C4h		Initialize system error handler
C5h		PnPnd dual CMOS (optional)
C6h		Initialize notebook docking (optional)
C7h		Initialize notebook docking late
C8h		Force check (optional)
C9h		Extended checksum (optional)
D2h		Unknown interrupt

Code	Beeps	
E0h		Initialize the chipset
E1h		Initialize the bridge
E2h		Initialize the CPU
E3h		Initialize the system timer
E4h		Initialize system I/O
E5h		Check force recovery boot
E6h		Checksum BIOS ROM
E7h		Go to BIOS
E8h		Set Huge Segment
E9h		Initialize Multi Processor
EAh		Initialize OEM special code
EBh		Initialize PIC and DMA
ECh		Initialize Memory type
EDh		Initialize Memory size
EEh		Shadow Boot Block
EFh		System memory test
F0h		Initialize interrupt vectors
F1h		Initialize Run Time Clock
F2h		Initialize video
F3h		Initialize System Management Mode
F4h	1	Output one beep before boot

Code	Beeps	
F5h		Boot to Mini DOS
F6h		Clear Huge Segment
F7h		Boot to Full DOS

Index of Symptom-to-FRU Error Message

LCD-Related Symptoms

Symptom / Error	Action in Sequence
LCD backlight doesn't work	Enter BIOS Utility to execute "Load Setup Default Settings",
LCD is too dark	then reboot system.
LCD brightness cannot be adjusted	Reconnect the LCD connectors.
LCD contrast cannot be adjusted	Keyboard (if contrast and brightness function key doesn't work).
	LCD inverter ID
	LCD cable
	LCD inverter
	LCD
	System board
Unreadable LCD screen	Reconnect the LCD connector
Missing pels in characters	LCD inverter ID
Abnormal screen	LCD cable
Wrong color displayed	LCD inverter
	LCD
	System board
LCD has extra horizontal or vertical lines	LCD inverter ID
displayed.	LCD inverter
	LCD cable
	LCD
	System board

Indicator-Related Symptoms

Symptom / Error	Action in Sequence
	Reconnect the inverter board Inverter board
	System board

Power-Related Symptoms

Symptom / Error	Action in Sequence
Power shuts down during operation	Power source (battery pack and power adapter). See "Power
	System Check" on page 103.
	Battery pack
	Power adapter
	Hard drive & battery connection board
	System board
The system doesn't power-on.	Power source (battery pack and power adapter). See "Power
	System Check" on page 103.
	Battery pack
	Power adapter
	Hard drive & battery connection board
	System board

Power-Related Symptoms

Symptom / Error	Action in Sequence
The system doesn't power-off.	Power source (battery pack and power adapter). See "Power System Check" on page 103.
	Hold and press the power switch for more than 4 seconds.
	System board
Battery can't be charged	See "Check the Battery Pack" on page 105.
	Battery pack
	System board

PCMCIA-Related Symptoms

Symptom / Error	Action in Sequence
System cannot detect the PC Card (PCMCIA)	PCMCIA slot assembly System board
PCMCIA slot pin is damaged.	PCMCIA slot assembly

Memory-Related Symptoms

Symptom / Error	Action in Sequence
Memory count (size) appears different from	Enter BIOS Setup Utility to execute "Load Default Settings,
actual size.	then reboot system.
	DIMM
	System board

Speaker-Related Symptoms

Symptom / Error	Action in Sequence
In Windows, multimedia programs, no	Audio driver
sound comes from the computer.	Speaker
	System board
Internal speakers make noise or emit no	Speaker
sound.	System board

Power Management-Related Symptoms

Symptom / Error	Action in Sequence
The system will not enter hibernation	See "Save to Disk (S4)" on page 38.
	Keyboard (if control is from the keyboard)
	Hard disk drive
	System board
The system doesn't enter hibernation mode and four short beeps every minute.	Press Fn+ 0 and see if the computer enters hibernation mode. Touchpad Keyboard Hard disk connection board Hard disk drive System board
The system doesn't enter standby mode after closing the LCD	See "Save to Disk (S4)" on page 38. LCD cover switch System board

Power Management-Related Symptoms

Symptom / Error	Action in Sequence
The system doesn't resume from	See "Save to Disk (S4)" on page 38.
hibernation mode.	Hard disk connection board
	Hard disk drive
	System board
The system doesn't resume from standby	See "Save to Disk (S4)" on page 38.
mode after opening the LCD.	LCD cover switch
	System board
Battery fuel gauge in Windows doesn't go higher than 90%.	Remove battery pack and let it cool for 2 hours.
	Refresh battery (continue use battery until power off, then charge battery).
	Battery pack
	System board
System hangs intermittently.	Reconnect hard disk/CD-ROM drives.
	Hard disk connection board
	System board

Peripheral-Related Symptoms

Symptom / Error	Action in Sequence
System configuration does not match the installed devices.	Enter BIOS Setup Utility to execute "Load Default Settings", then reboot system.
	Reconnect hard disk/CD-ROM/diskette drives.
External display does not work correctly.	Press Fn+F5, LCD/CRT/Both display switching
	System board
USB does not work correctly	System board
Print problems.	Ensure the "Parallel Port" in the "Onboard Devices Configuration" of BIOS Setup Utility is set to Enabled.
	Onboard Devices Configuration
	Run printer self-test.
	Printer driver
	Printer cable
	Printer
	System Board
Serial or parallel port device problems.	Ensure the "Serial Port" in the Devices Configuration" of BIOS Setup Utility is set to Enabled.
	Device driver
	Device cable
	Device
	System board

Keyboard/Touchpad-Related Symptoms

Symptom / Error	Action in Sequence
Keyboard (one or more keys) does not	Reconnect the keyboard cable.
work.	Keyboard
	System board

Keyboard/Touchpad-Related Symptoms

Symptom / Error	Action in Sequence
Touchpad does not work.	Reconnect touchpad cable.
	Touchpad board
	System board

Modem-Related Symptoms

Symptom / Error	Action in Sequence
Internal modem does not work correctly.	Modem phone port
	modem combo board
	System board

NOTE: If you cannot find a symptom or an error in this list and the problem remains, see "Undetermined Problems" on page 120.

Intermittent Problems

Intermittent system hang problems can be caused by a variety of reasons that have nothing to do with a hardware defect, such as: cosmic radiation, electrostatic discharge, or software errors. FRU replacement should be considered only when a recurring problem exists.

When analyzing an intermittent problem, do the following:

- 1. Run the advanced diagnostic test for the system board in loop mode at least 10 times.
- 2. If no error is detected, do not replace any FRU.
- 3. If any error is detected, replace the FRU. Rerun the test to verify that there are no more errors.

Undetermined Problems

The diagnostic problems does not identify which adapter or device failed, which installed devices are incorrect, whether a short circuit is suspected, or whether the system is inoperative.

Follow these procedures to isolate the failing FRU (do not isolate non-defective FRU).

NOTE: Verify that all attached devices are supported by the computer.

NOTE: Verify that the power supply being used at the time of the failure is operating correctly. (See "Power System Check" on page 103.):

- 1. Power-off the computer.
- 2. Visually check them for damage. If any problems are found, replace the FRU.
- 3. Remove or disconnect all of the following devices:

Non-Acer devices
Printer, mouse, and other external devices
Battery pack
Hard disk drive
DIMM
CD-ROM/Diskette drive Module
PC Cards

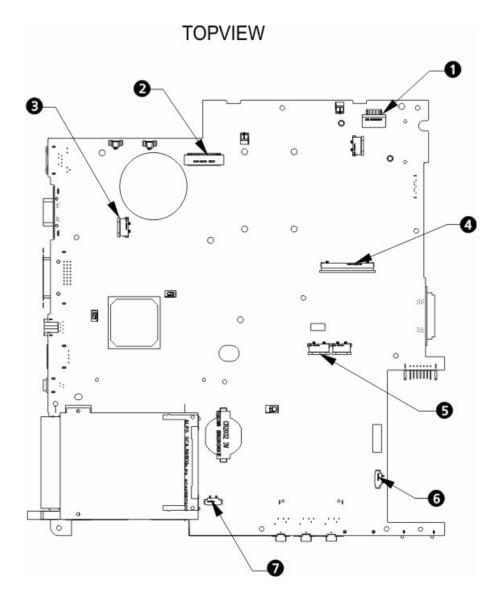
- 4. Power-on the computer.
- 5. Determine if the problem has changed.
- 6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.
- 7. If the problem remains, replace the following FRU one at a time. Do not replace a non-defective FRU:

System board

LCD assembly

Jumper and Connector Locations

Top View

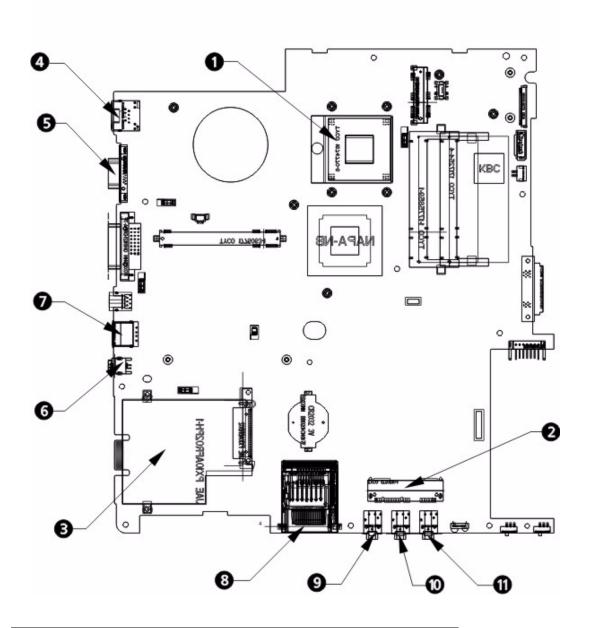


No.	Description	No.	Description
1	Power Cable Connector	5	Fingerprint/Touchpad Connector
2	LCD Cable Connector	6	Bluetooth Connector
3	Touchpad Board Connector	7	Speaker Connector
4	Keyboard Connector		

Chapter 5 121

Bottom View

BOTTOMVIEW



No.	Description	No.	Description
1	CPU	7	USB Connector
2	SATA Connector	8	Card Reader
3	PC Card Reader	9	Line-out jack
4	LAN Connector	10	Mic-in jack
5	CRT Connector	11	Headphone jack
6	1394 Connector		

Standard Operation Procedures of Password Bypassing and BIOS Recovery

For RD and CSD to debug easily, the system provide one hardware DIP switch for Bypassing Password Check, and one Hotkey to enable BIOS Recovery.

1. DIP Switches:

DIP	Default Setting	Description
SW1	Disabled (High)	Bypassing Password Check

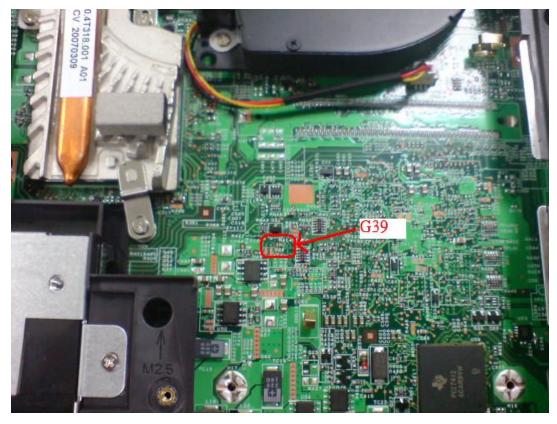
Hotkey to enable BIOS Recovery: Fn+ESC, then Power Button. To use this function, it is strongly
recommended that the AC adapter is connected to the system and plug-in to a wall outlet and the Battery
is also in the system

Bypassing Password Check (SW1): If the user has set Password (power-on or setup password) for security reason, BIOS will check password during POST or when entering the BIOS setup menu. However, if it is necessary to ignore the password check, the user may enable DIP SW1 to bypass password check.

BIOS Recovery: Boot Block is a special block of BIOS. It is used to boot up the system with minimum BIOS initialization. The user can enable this feature to restore the BIOS to a successful one if previous BIOS flashing process fails.

1. DIP Location:

RD/CSD can enable or disable this function by switching the DIP. The DIP switch is located as shown in the figure below:



2. Clear Password

DIP SW1: Bypassing Password Check, Disabled by default. Switching it to ON then powering on the system will force the BIOS to clear Supervisor and User passwords. The power-on, setup password, and the HDD password are all cleared.

3. Restore BIOS by the Crisis Disk

Enable this function by pressing the combination: **Fn+ESC**, and pressing the **Power Button**. To use this function, it is strongly recommended that the AC adapter is connected to the system and plug-in to a wall outlet and the Battery is also in the system. If this function is enabled, the system will force the BIOS to enter a

Chapter 5 123

special BIOS block, called BootBlock. RD/CSD can use this special BIOS code to recover the BIOS to a successful one if previous BIOS flashing process fails. However, before doing this, one Crisis Disk should be prepared in WinXP. Detailed steps are as the followings:

- a. Prepare the Crisis Disk in WinXP.
- **b.** Insert the Crisis Disk to a USB floppy drive which is attached to the failed machine.
- c. While the system is turned off, press and hold Fn+ESC, then press Power Button. The system should be powered on with Crisis Recovery process.
- d. BootBlock BIOS starts to restore the failed BIOS code. Short beeps should be heard when flashing.
- **e.** If the flashing process is finished, a long beep should be heard.
- **f.** Power down the system after you hear the long beep.

If the crisis recovery process is finished, the system should be powered on with the successful BIOS. RD/CSD can then update the BIOS to a workable one by regular BIOS flashing process.

FRU (Field Replaceable Unit) List

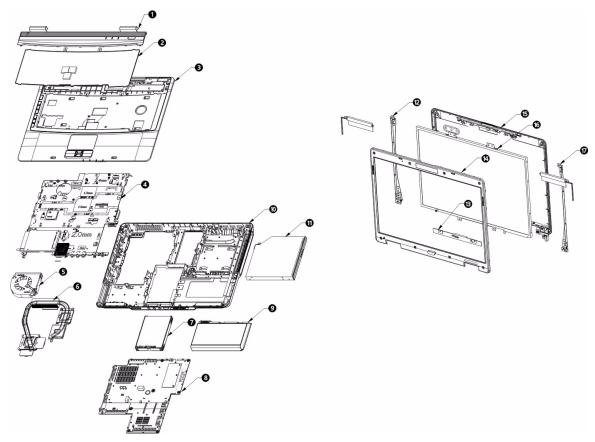
This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of TravelMate 5720/5320 and Extensa 5620/5220. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.

Chapter 6 125

TravelMate 5720/5320 and Extensa 5620/5220 Exploded Diagram



TravelMate 5720/5320 and Extensa 5620/5220 FRU List

Category	No.	Part Name and Description	Acer Part No.
Adapter			
		ADAPTER 90W DELTA ADP-90SB BBDAR	AP.09001.010
		ADAPTER 90W DELTA ADP-90SB BBEA LF	AP.09001.013
		ADAPTER 90W LITEON PA-1900- 04WR	AP.09003.005
		ADAPTER 90W LITEON PA-1900- 24AR	AP.09003.011
Battery-	'		

Category	No.	Part Name and Description	Acer Part No.
		BATTERY PACK LI+ 6CELL 2.0MAH SANYO	BT.00603.029
		BATTERY PACK LI+ 6CELL 2.0MAH SONY	BT.00604.015
		BATTERY PACK LI 6CELL 2.0MAH PANASONIC	BT.00605.014
		BATTERY PACK LI 6CELL 2.0MAH SIMPLO	BT.00607.008
		BATTERY PACK LI+ 8CELL 2.4MAH SANYO	BT.00803.022
		BATTERY PACK LI+ 8CELL 2.4MAH SONY	BT.00804.019
		BATTERY PACK LI+ 8CELL 2.4MAH PANASONIC	BT.00805.010
		BATTERY PACK LI+ 8CELL 2.4MAH SIMPLO	BT.00807.013
		RTC BATTERY COIN BATTERY CR2032 MITSUBISHI	23.TCZV1.004
Boards			
		WIRELESS LAN BOARD 802.11ABG INTEL 3945 MW1	KI.GLN01.001
Constitution of Constitution o		WIRELESS LAN BOARD 802.11ABG INTEL 3945 MW2	KI.GLN01.002
		WIRELESS LAN BOARD 802.11ABG INTEL 3945 RW	KI.GLN01.003
		WIRELESS LAN BOARD 802.11ABG INTEL 3945BG	KI.GLN01.005
		WIRELESS LAN BOARD 802.11ABG KEDRON MOW1	KI.KDN01.001
		WIRELESS LAN BOARD 802.11ABG KEDRON MOW2	KI.KDN01.002
		WIRELESS LAN BOARD 802.11ABG KEDRON ROW	KI.KDN01.003
		WIRELESS LAN BOARD 802.11ABG KEDRON	KI.KDN01.005
		VGA BOARD ATI MXM66 256MB GDDR2 MXM-1N M66M VGA Board	55.TKA01.001
		BLUETOOTH BOARD FOXCONN BCM2045 V01	54.TB2V1.001
		TOUCHPAD SCROLL-KEY BOARD COLUMBIA 07524-1 TP BD	55.TK201.001
		USB BOARD COLUMBIA 06583-1	55.TK901.001
		LAUNCH BOARD COLUMBIA 06584-1	55.TK901.002
		POWER BOARD COLUMBIA 06585- 1M	55.TK901.003
		FINGER PRINTER BOARD COLUMBIA 07525-1 FP BD	55.TK901.004
		SENSOR BOARD BIWA MINI SENSOR BD 07522-2M	56.TK901.005

Chapter 6 127

Category	No.	Part Name and Description	Acer Part No.
		TOUCHPAD SCROLL-KEY BOARD COLUMBIA 06587-1	56.TKC01.001
III.		TOUCHPAD BOARD SYNAPTICS TM00372-012	56.TK901.001
		INVERTER BOARD 17" DARFON VK.21189.801	19.TK901.001
		INVERTER BOARD 17" FOXCONN T62I249.00	19.TK901.002
		INVERTER BOARD 17" YEC YNV- W10	19.TK901.004
		MODEM BOARD FOXCONN T60M955.00 3.3V	FX.22500.009
Cables			
		FINGER PRINT BOARD CABLE	50.TK901.001
		TOUCHPAD CABLE	50.TK901.002
		LAUNCH BOARD CABLE	50.TK901.003
		POWER BOARD CABLE	50.TK901.004
		BLUETOOTH CABLE	50.TK901.005
		MODEM CABLE	50.TK901.006
		USB BOARD CABLE	50.TK901.007
		DC-IN CABLE	50.TK901.008
		COVER SWITCH CABLE	50.TK901.009
		LCD/CAMERA CABLE C.A. LCD WXGA HT COLUMBIA	50.TK901.011

Category	No.	Part Name and Description	Acer Part No.
		POWER CORD 10A 125V US	27.T30V1.001
		POWER CORD 10A 125V 3PIN US BK	27.01518.641
		POWER CORD 2.5A 125V 8121- USA/W CNS	27.01518.781
		POWER CORD 220V 3PIN EUR	27.T30V1.004
		POWER CABLE 16A 250V 3PIN EUR UK	27.01518.731
		POWER CORD 3A 250V 3PIN UK	27.01518.541
		POWER CORD 5A 250V 3PIN UK BK	27.03118.001
		POWER CORD 10A 3PIN BK DENMARK	27.01518.561
		POWER CORD 10A 250V 3PIN DENMARK BK	27.01518.671
		POWER CORD 10A 250V 3PIN BK SOUTH AFRICA	27.01518.571
		POWER CORD 16A 250V SOUTH AFRICA BK	27.01518.681
		POWER CORD 10A 250V SWISS	27.01518.581
		POWER CORD 10A 250V 3PIN SWISS BK	27.01518.691
		POWER CORD 10A 250V 3PIN CHINA	27.01518.591
		POWER CORD 10A 250V 3PIN CHINA BK	27.01518.701
		POWER CORD 10A 250V 3PIN ITALY	27.01518.611
		POWER CORD 10A 250V 3PIN ITALY BK	27.01518.711
		POWER CORD 2.5A 250V SOUTH AFRICA BK (INDIA)	27.01518.631
		POWER CORD 10A 250V SOUTH AFRICA BK (INDIA)	27.01518.721
		POWER CORD 2.5A 250V AUSTRALIA	27.01518.621
		POWER CORD ACA/ACNZ	27.03218.021
		POWER CORD 7A 125V 2PIN JAPEN	27.01518.551
		POWER CORD 7A 125V 2PIN JAPAN	27.03518.161
		POWER CORD 7A 250V 2PIN KOREA	27.01518.531
		POWER CORD 250V 10A 3PIN ISRAEL	27.01518.761
Case/Cover/Bracket/Assembly			
		VGA BOARD BRACKET MXM BRACKET ASSEMBLY	33.TK801.001
		TOUCH PAD BRACKET ASSEMBLY	33.TK901.001
		PCMCIA DUMMY CARD	42.TB1V1.003
		NEW CARD DUMMY CARD COLUMBIA	42.TK901.005
		MIDDLE COVER ASSEMBLY	42.TK901.001
		NEW CARD DUMMY CARD	42.TK901.005
		SD DUMMY CARD	42.TK901.006

Chapter 6 129

Category	No.	Part Name and Description	Acer Part No.
		LOWER CASE W/SPEAKER ASSY L- CASE COLUMBIA	60.TKA01.001
		UNITLOAD COVER W/DASP ASSY BIG DOOR HDD DASP COLUMBIA	60.TK901.007
		UPPER CASE W/ COVER SWITCH CABLE	60.TKC01.002
		UNIT LOAD COVER L-CASE DOOR ASSEMBLY	60.TK901.003
		OPTICAL BRACKET	33.TK901.002
		COMBO BEZEL	42.TK901.002
		DVD-RW BEZEL	42.TK501.002
		HDD HOLDER DASP PROTECTION BIWA	42.TK501.004
		HDD BRACKET ASSEMBLY	33.TK901.003
		LCD BRACKET RIGHT	33.TK901.004
		LCD BRACKET LEFT	33.TK901.005
		LCD COVER 15.4" W/ HINGE & LOGO (MG-AL PANEL) COLUMBIA	60.TK901.006
		LCD BEZEL 15.4" W/ LOGO FOR CCD	60.TK901.005
		HINGE PACK LEFT/RIGHT	6K.TK901.001
		SPEAKER	23.TK901.002
Combo Module	•		
Francisco de la constanción de			
		COMBO MODULE 24X SONY CRX880A LF W/O BEZEL	KO.0240E.005
The boundary of the control of the c		COMBO MODULE 24X PANASONIC UJDA-780 LF W/O BEZEL	KO.02407.028
		COMBO MODULE 24X HLDS GCC-T 10N W/O BEZEL DALLEN	KO.0240D.005
CPU/Processor			
GPU KCN00017405410005EKS00		CPU INTEL MEROM CORE2DUAL T7100 1.8G 2M 800	KC.71001.DTP

Category	No.	Part Name and Description	Acer Part No.
		CPU INTEL MEROM CORE2DUAL T7300 2.0G 4M 800L	KC.73001.DTP
		CPU INTEL MEROM CORE2DUAL T7500 2.2G 4M 800	KC.75001.DTP
		CPU INTEL MEROM CORE2DUAL T7700 2.4G 4M 800L	KC.77001.DTP
DVD-RW Drive	I.		
		ASSEMBLY SUPLER MULTI MODULE 8X	6M.TK901.002
DVD Module			
		DVD-RW DRIVE 8X S-MUTI PIONEERDVR-K17RS LF W/O BEZEL	KU.00805.038
The bank to the first the second of the seco		DVD-RW DRIVE 8X S-MULTI PANASONIC UJ-850UAA1-A LF W/O BEZEL	KU.00807.055
		DVD-RW DRIVE 8X S-MULTI PHILIPS DS-8A1P LF W/O BEZEL	KU.00809.010
		DVD-RW DRIVE 8X S-MULTI HLDS GSA-T20N LF W/O BEZEL	KU.0080D.027
Fan			
Heatsink			
		CPU HEATSINK W/SCREW W/O FAN	60.TKA01.002
HDD/Hard Disk Drive			
		HDD 80GB 5400RPM SATA SEAGATE ST980811AS VENUS LF	KH.08001.030
		HDD 80GB 5400RPM SATA HGST HTS541680J9SA00 SURUGA-B LF	KH.08007.021
		HDD 80GB 5400RPM SATA WD WD800BEVS-22RST0ML80 LF	KH.08008.033
		HDD 80GB 5400RPM SATA TOSHIBA MK8037GSX GEMINI BS LF	KH.08004.010
		HDD 120GB 5400RPM SATA SEAGATE ST9120822AS VENUS LF	KH.12001.031
		HDD 120GB 5400RPM SATA HGST HTS541612J9SA00 SURUGA-B LF	KH.12007.010
		HDD 120GB 5400RPM SATA TOSHIBA MK1237GSX GEMINI BS LF	KH.12004.006
		HDD 120GB 5400RPM SATA WD WD1200BEVS-22RST0 ML80 LF	KH.12008.018
		HDD 160GB 5400RPM SATA SEAGATE ST9160821AS VENUS LF	KH.16001.026
		HDD160GB 5400RPM SATA TOSHIBA MK1637GSX GEMINI BS LF	KH.16004.001

Chapter 6 131

Category	No.	Part Name and Description	Acer Part No.
		HDD 160GB 5400RPM SATA HGST HTS541616J9SA00 SURUGA-B LF	KH.16007.011
		HDD 160GB 5400RPM SATA WD WD1600BEVS-22RST0 ML80 LF	KH.16008.019
HEATSINK			
		CPU HEATSINK ASSY COLUMBIA INTEL UMA FORCE	60.TKC01.003
Keyboard			
		KEYBOARD 14_15KB-EV2 88KS BLACK US INTERNATIONAL (BIG ERGO) DARFON	KB.INT00.002
		KEYBOARD 14_15KB-EV2 88KS BLACK US INTERNATIONAL HEBREW (BIG ERGO) DARFON	KB.INT00.003
		KEYBOARD 14_15KB-EV2 89KS BLACK UK (BIG ERGO) DARFON	KB.INT00.004
		KEYBOARD 14_15KB-EV2 89KS BLACK TURKISH (BIG ERGO) DARFON	KB.INT00.005
		KEYBOARD 14_15KB-EV2 88KS BLACK THAILAND (BIG ERGO) DARFON	KB.INT00.006
		KEYBOARD 14_15KB-EV2 89KS BLACK SWISS/G (BIG ERGO) DARFON	KB.INT00.007
		KEYBOARD 14_15KB-EV2 89KS BLACK SWEDISH (BIG ERGO) DARFON	KB.INT00.008
		KEYBOARD 14_15KB-EV2 89KS BLACK SPANISH (BIG ERGO) DARFON	KB.INT00.009
		KEYBOARD 14_15KB-EV2 89KS BLACK SLOVENIAN (BIG ERGO) DARFON	KB.INT00.010
		KEYBOARD 14_15KB-EV2 88KS BLACK RUSSIAN (BIG ERGO) DARFON	KB.INT00.013
		KEYBOARD 14_15KB-EV2 89KS BLACK PORTUGUESE (BIG ERGO) DARFON	KB.INT00.014
		KEYBOARD 14_15KB-EV2 89KS BLACK NORWEGIAN (BIG ERGO) DARFON	KB.INT00.016
		KEYBOARD 14_15KB-EV2 88KS BLACK KOREAN (BIG ERGO) DARFON	KB.INT00.018
		KEYBOARD 14_15KB-EV2 93KS BLACK JAPANESE (BIG ERGO) DARFON	KB.INT00.019
		KEYBOARD 14_15KB-EV2 89KS BLACK ITALIAN (BIG ERGO) DARFON	KB.INT00.020
		KEYBOARD 14_15KB-EV2 89KS BLACK HUNGARIAN (BIG ERGO) DARFON	KB.INT00.023

Category	No.	Part Name and Description	Acer Part No.
		KEYBOARD 14_15KB-EV2 88KS BLACK GREEK (BIG ERGO) DARFON	KB.INT00.024
		KEYBOARD 14_15KB-EV2 89KS BLACK GERMAN (BIG ERGO) DARFON	KB.INT00.025
		KEYBOARD 14_15KB-EV2 89KS BLACK FRENCH (BIG ERGO) DARFON	KB.INT00.026
		KEYBOARD 14_15KB-EV2 89KS BLACK DANISH (BIG ERGO) DARFON	KB.INT00.029
		KEYBOARD 14_15KB-EV2 89KS BLACK CZECH (BIG ERGO) DARFON	KB.INT00.030
		KEYBOARD 14_15KB-EV2 88KS BLACK TRADITIONAL CHINESE (BIG ERGO) DARFON	KB.INT00.031
		KEYBOARD 14_15KB-EV2 89KS BLACK CANADIAN FRENCH (BIG ERGO) DARFON	KB.INT00.032
		KEYBOARD 14_15KB-EV2 89KS BLACK BRAZILIAN PORTUGUESE (BIG ERGO) DARFON	KB.INT00.033
		KEYBOARD 14_15KB-EV2 89KS BLACK BELGIUM (BIG ERGO) DARFON	KB.INT00.034
		KEYBOARD 14_15KB-EV2 88KS BLACK ARABIC/ENGLISH (BIG ERGO) DARFON	KB.INT00.035
LCD Module			
		LCD MODULE 15.4" WXGA NONE GLARE W/ ANTENNA & 0.3M CAMERA	6M.TK901.003
		LCD 15.4" WXGA AU B154EW02-V0 NONE GLARE	LK.15405.013
		LCD 15.4" WXGA SAMSUNG LTN154XA-L01-0 NONE GLARE LF	LK.15406.016
		LCD 15.4" WXGA CMO N154I2-L01 NONE GLARE LF	LK.1540D.016
		LCD 15.4" WXGA LG LP154WX4- TLA2 NONE GLARE	LK.15408.027
		LCD MODULE 15.4" WXGA GLARE W/ ANTENNA & 0.3M CAMERA	6M.TK901.005
		LCD 15.4" WXGA AU B154EW02-V1 GLARE	LK.15405.014
		LCD 15.4" WXGA SAMSUNG LTN154XA-L01-G GLARE LF	LK.15406.017
		LCD 15.4" WXGA CMO N154I2-L02 GLARE LF	LK.1540D.012
		LCD 15.4" WXGA LG LP154WX4- TLC2 GLARE	LK.15408.028
Camera			
		CAMERA CMOS 0.3M BISON BN30V4O717300 UVC	57.TK501.001

Chapter 6 133

Category	No.	Part Name and Description	Acer Part No.
		CAMERA CMOS 0.3M SUYIN CN0314-OV03 UVC	57.TK901.001
Communication Module			
		WIRELESS ANTENNA RIGHT	25.TK901.001
		WIRELESS ANTENNA LEFT	25.TK901.002
Microphone			
		MICROPHONE CABLE	23.TK901.003
Main Board			
		MAINBOARD TM5720 INTEL PM965 ICH8M 256M-GD2 BCM578MKMLG LF W/ 1394 & FIR & DVI W/ MODEM & RTC BATTERY	MB.TK301.001
		MAINBOARD TM5720 UMA ICH8M BCM5787MKMLG LF W/ 1394 & RTC BATTERY & MODEM	MB.TK201.001
PCMCIA Slot/PC Card Slot			
		PCMCIA 4PIN SLOT CONN CARD BUS PX10AFR02PH-1	22.TK901.001
Memory			
		SDIMM 1GB DDRII667 SAMSUNG M470T2953EZ3-CE6	KN.1GB0B.011
Compared to the Compared to th		SDIMM 512MB DDRII667 NANYA NT512T64UH8B0FN-3C LF	KN.51203.032
		SDIMM 512MB DDRII667 SAMSUNG M470T6554EZ3-CE6 LF	KN.5120B.023
		SDIMM 512MB DDRII667 HYNIX HYMP564S64CP6-Y5AB LF	KN.5120G.019
		SDIMM 512MB DDRII667 PROMOS V916764B24QBFW-F5 LF	KN.5120M.004
		SDIMM 1GB DDRII667 NANYA NT1GT64U8HB0BN-3C LF	KN.1GB03.014
		SDIMM 1GB DDRII667 HYNIX HYMP512S64CP8-Y5 LF	KN.1GB0G.006
		SDIMM 1GB DDRII667 PROMOS V916765G24QBFW-F5	KN.1GB0M.001
Miscellaneous			
		LOGO PLATE FOR PANEL	31.A30V1.001
		LOGO PLATE FOR BEZEL	31.A46V1.001
		NAME PLATE TM5720	40.TKA01.001
		LCD SCREW RUBBER	47.TK501.001
Screws			
		SCREW M2 x L3 (WHITE)	86.00C07.220
		SCREW M2.5 x L6 NYLOK CR3+	86.00E33.736
		SCREW M2.5 x L8 NYLOK CR3+	86.00E34.738
		SCREW M2.5 x 5 NI	86.TK901.001
		SCREW M2.5 x L5 BLACK ZN+NYLOK	86.TK501.001
		SCREW DIMM COVER STEEL	86.00A02.140
		SCREW M2 x 4 WAFER NI	86.9A552.4R0
		SCREW NI M2 x L6	86.9A552.6R0

Chapter 6 135

Model Definition and Configuration

TravelMate 5720/5320 Series

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1ANW XMi	AAP	India	LX.AV 30C.0 02	AS5051AN WXMi LINPUSIL1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Indonesia	LX.AV 30C.0 03	AS5051AN WXMi LINPUSIN1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Malaysia	LX.AV 30C.0 05	AS5051AN WXMi LINPUSMA 2 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Philippines	LX.AV 30C.0 04	AS5051AN WXMi LINPUSPH 1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Singapore	LX.AV 30C.0 01	AS5051AN WXMi LINPUSSG 1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Thailand	LX.AV 30C.0 06	AS5051AN WXMi LINPUSTH 2 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Vietnam	LX.AV 30C.0 07	AS5051AN WXMi LINPUSVN 1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	PA	USA/ Canada - Canadian French	LX.AV 30J.00 1	AS5051AW XMi MCECF UMAC 2*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	PA	USA/ Canada - Canadian French	LX.AV 30J.00 2	AS5051AW XMi MCEUS UMAC 2*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Australia/ New Zealand	LX.AV 305.00 1	AS5051AW XMi XPHAU1 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	PA	USA/ Canada	LX.AV 305.00 8	AS5051AW XMi XPHEN1 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	PA	ACLA- Spanish	LX.AV 305.01 0	AS5051AW XMi XPHES1 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	PA	USA/ Canada	LX.AV 305.00 9	AS5051AW XMi XPHFR1 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Indonesia	LX.AV 305.00 7	AS5051AW XMi XPHIN1 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Malaysia	LX.AV 305.00 3	AS5051AW XMi XPHMA2 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Philippines	LX.AV 305.00 2	AS5051AW XMi XPHPH1 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	AAP	Thailand	LX.AV 305.00 4	AS5051AW XMi XPHTH2 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Vietnam	LX.AV 305.00 5	AS5051AW XMi XPHVN1 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Singapore	LX.AV 305.00 6	AS5051AW XMi XPHWSG2 1W UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	PA	ACLA- Portuguese	LX.AV 305.01 1	AS5051AW XMi XPHXC1 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	TWN	GCTWN	S2.AV 305.00 1	AS5051AW XMi XPHTC1 UMAC 2*512/120/ BT/6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII6	SO512 MBII6	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	FOX_ BRM_ 2.0	N
AS505 2WXM i	TWN	GCTWN	S2.AV 305.00 2	AS5052WX Mi XPHTC1 UMAC 2*512/100/ BT/6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	FOX_ BRM_ 2.0	N
AS505 5WXM i	TWN	GCTWN	\$2.AV 305.00 3	AS5055WX Mi XPHTC1 UMAC 2*1G/160/ BT/6L/5R/ CB_bg_0.3 C_AN	ATTL6 0	N14.1 WXGA G	SO1G BII5	SO1G BII5	N160 GB5.4 KS	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	N
AS505 1AWX Ci	China	Hong Kong	LX.AV 305.01 6	AS5051AW XCi XPHHK9 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NCB2 4X	ABT_ ATH54 13BG	N	N
AS505 1AWX Ci	China	China	LX.AV 305.01 5	AS5051AW XCi XPHSC7 UMAC 1*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NCB2 4X	ABT_ ATH54 13BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	TWN	GCTWN	LX.AV 305.01 2	AS5051AW XMi XPHTC1 UMAC 1*512/120/ BT/6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	FOX_ BRM_ 2.0	N
AS505 1AWX Mi	TWN	GCTWN	LX.AV 305.01 4	AS5051AW XMi XPHTC1 UMAC 1*512/60/ BT/6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ ATH54 13BG	FOX_ BRM_ 2.0	N
AS505 1AWX Mi	TWN	GCTWN	LX.AV 305.01 3	AS5051AW XMi XPHTC1 UMAC 1*512/80/ BT/6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	FOX_ BRM_ 2.0	N
AS505 1AWX Mi	AAP	Australia/ New Zealand	LX.AV 30J.01 1	AS5051AW XMi MCEAU1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Singapore	LX.AV 30J.01 2	AS5051AW XMi MCESG1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	India	LX.AV 30J.01 3	AS5051AW XMi MCEIL1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Indonesia	LX.AV 30J.01 4	AS5051AW XMi MCEIN1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Philippines	LX.AV 30J.01 5	AS5051AW XMi MCEPH1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Malaysia	LX.AV 30J.01 6	AS5051AW XMi MCEMA1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	AAP	Thailand	LX.AV 30J.01 7	AS5051AW XMi MCETH1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Vietnam	LX.AV 30J.01 8	AS5051AW XMi MCEVN1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	AAP	Australia/ New Zealand	LX.AV 306.00 2	AS5051AW XMi XPPAU1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	AAP	Australia/ New Zealand	LX.AV 30J.00 3	AS5052WX Mi MCEAU1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	AAP	India	LX.AV 30J.00 5	AS5052WX Mi MCEIL1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	AAP	Indonesia	LX.AV 30J.00 6	AS5052WX Mi MCEIN1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	AAP	Singapore	LX.AV 30J.00 4	AS5052WX Mi MCESG1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	AAP	Philippines	LX.AV 30J.00 7	AS5052WX Mi MCEPH1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	AAP	Malaysia	LX.AV 30J.00 8	AS5052WX Mi MCEMA1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 2WXM i	AAP	Thailand	LX.AV 30J.00 9	AS5052WX Mi MCETH1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	AAP	Vietnam	LX.AV 30J.01 0	AS5052WX Mi MCEVN1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	AAP	Australia/ New Zealand	LX.AV 306.00 1	AS5052WX Mi XPPAU1 UMAC 1*1G/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	India	LX.AV 30C.0 15	AS5051AN WXMi LINPUSIL1 UMAC 1*256/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO256 MBII5	N	N60G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Vietnam	LX.AV 30C.0 14	AS5051AN WXMi LINPUSVN 1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Thailand	LX.AV 30C.0 16	AS5051AN WXMi LINPUSTH 2 UMAC 1*512/80/ BT/6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	FOX_ BRM_ 2.0	N
AS505 1ANW XMi	AAP	Singapore	LX.AV 30C.0 08	AS5051AN WXMi LINPUSSG 1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	India	LX.AV 30C.0 09	AS5051AN WXMi LINPUSIL1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Indonesia	LX.AV 30C.0 10	AS5051AN WXMi LINPUSIN1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1ANW XMi	AAP	Philippines	LX.AV 30C.0 11	AS5051AN WXMi LINPUSPH 1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Malaysia	LX.AV 30C.0 12	AS5051AN WXMi LINPUSMA 2 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1ANW XMi	AAP	Thailand	LX.AV 30C.0 13	AS5051AN WXMi LINPUSTH 2 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	AAP	Thailand	LX.AV 30J.01 9	AS5052WX Mi MCETH1 UMAC 1*1G/120/ BT/6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	FOX_ BRM_ 2.0	N
AS505 1AWX Mi	EMEA	Belgium	LX.AV 30J.03 2	AS5051AW XMi MCEBE6 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Middle East	LX.AV 30J.04 3	AS5051AW XMi MCEAR1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Middle East	LX.AV 30J.04 4	AS5051AW XMi MCEAR2 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Italy	LX.AV 30J.04 0	AS5051AW XMi MCEIT7 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Spain	LX.AV 30J.03 9	AS5051AW XMi MCEESJ UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 30J.03 0	AS5051AW XMi MCECS5 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Denmark	LX.AV 30J.02 4	AS5051AW XMi MCEDK6 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	France	LX.AV 30J.02 5	AS5051AW XMi MCEFRF UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Germany	LX.AV 30J.02 7	AS5051AW XMi MCEDEA UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Germany	LX.AV 30J.02 8	AS5051AW XMi MCEDEB UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Holland	LX.AV 30J.03 3	AS5051AW XMi MCENL6 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Norway	LX.AV 30J.03 4	AS5051AW XMi MCENO5 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Russia	LX.AV 30J.03 5	AS5051AW XMi MCERU9 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 30J.03 6	AS5051AW XMi MCEPL7 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Slovenia/ Croatia	LX.AV 30J.03 7	AS5051AW XMi MCESI1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Portugal	LX.AV 30J.03 8	AS5051AW XMi MCEPT6 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Sweden/ Finland	LX.AV 30J.02 9	AS5051AW XMi MCESV5 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Turkey	LX.AV 30J.04 1	AS5051AW XMi MCETR5 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Switzerland	LX.AV 30J.04 5	AS5051AW XMi MCESW8 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 30J.04 6	AS5051AW XMi MCEUK5 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 30J.04 7	AS5051AW XMi MCEWUK1 1W UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Italy	LX.AV 30J.04 2	AS5051AW XMi MCEWIT11 W UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Germany	LX.AV 30J.03 1	AS5051AW XMi MCEWDE1 1W UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	France	LX.AV 30J.02 6	AS5051AW XMi MCEWFR1 1W UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Belgium	LX.AV 305.01 9	AS5051AW XMi XPHBE1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Middle East	LX.AV 305.03 8	AS5051AW XMi XPHAR1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 305.02 7	AS5051AW XMi XPHCS2 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Germany	LX.AV 305.02 3	AS5051AW XMi XPHDE7 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Greece	LX.AV 305.03 3	AS5051AW XMi XPHEL1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Israel	LX.AV 305.03 4	AS5051AW XMi XPHIS1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Italy	LX.AV 305.03 5	AS5051AW XMi XPHIT1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Denmark	LX.AV 305.01 8	AS5051AW XMi XPHDK1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Holland	LX.AV 305.02 0	AS5051AW XMi XPHNL1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	France	LX.AV 305.02 1	AS5051AW XMi XPHFRA UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 305.02 8	AS5051AW XMi XPHHU6 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Spain	LX.AV 305.03 1	AS5051AW XMi XPHESA UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Slovenia/ Croatia	LX.AV 305.03 0	AS5051AW XMi XPHSLO2 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 305.02 9	AS5051AW XMi XPHPL6 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Portugal	LX.AV 305.03 2	AS5051AW XMi XPHPT1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Switzerland	LX.AV 305.03 9	AS5051AW XMi XPHSW5 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Turkey	LX.AV 305.03 6	AS5051AW XMi XPHTR1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	South Africa	LX.AV 305.01 7	AS5051AW XMi XPHSA1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Norway	LX.AV 305.02 4	AS5051AW XMi XPHNO1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Russia	LX.AV 305.02 5	AS5051AW XMi XPHRU2 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Sweden/ Finland	LX.AV 305.02 6	AS5051AW XMi XPHSV1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	France	LX.AV 305.02 2	AS5051AW XMi XPHWFRB 1W UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Italy	LX.AV 305.03 7	AS5051AW XMi XPHWIT21 W UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 305.04 0	AS5051AW XMi XPHUK1 UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 305.04 1	AS5051AW XMi XPHWUK2 1W UMAC 2*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	SO512 MBII6	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 2WXM i	PA	USA/ Canada - Canadian French	LX.AV 30J.02 0	AS5052WX Mi MCECF UMAC 2*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 2WXM i	PA	USA/ Canada - Canadian French	LX.AV 30J.02 1	AS5052WX Mi MCEUS UMAC 2*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 2WXM i	PA	ACLA- Spanish	LX.AV 30J.02 2	AS5052WX Mi MCEES1 UMAC 2*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	PA	ACLA- Spanish	LX.AV 30J.04 8	AS5051AW XMi MCEES1 UMAC 2*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1ANW XCi	AAP	Australia/ New Zealand	LX.AV 30C.0 17	AS5051AN WXCi LINPUSAU 1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NCB2 4X	ABT_ BRM4 318BG	N	N
AS505 1AWX Ci	AAP	Malaysia	LX.AV 305.04 2	AS5051AW XCi XPHMA2 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NCB2 4X	ABT_ BRM4 318BG	N	N
AS505 1ANW XCi	AAP	Malaysia	LX.AV 30C.0 18	AS5051AN WXCi LINPUSMA 2 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NCB2 4X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Sweden/ Finland	LX.AV 30J.04 9	AS5051AW XMi MCESV5 UMAC 1*512/100/ BT/6L/5R/ CB_bg_VP _0.3C_AN	ATMK 36		SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	BT VoIP PCMC IA
AS505 1AWX Mi	EMEA	Slovenia/ Croatia	LX.AV 30J.05 0	AS5051AW XMi MCESI1 UMAC 1*512/100/ BT/6L/5R/ CB_bg_VP _0.3C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	BT VoIP PCMC IA
AS505 1AWX Mi	EMEA	Holland	LX.AV 30J.05 1	AS5051AW XMi MCENL6 UMAC 1*512/100/ BT/6L/5R/ CB_bg_VP _0.3C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	BT VoIP PCMC IA

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Russia	LX.AV 30J.05 2	AS5051AW XMi MCERU9 UMAC 1*512/100/ BT/6L/5R/ CB_bg_VP _0.3C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	BT VoIP PCMC IA
AS505 1AWX Mi	EMEA	Holland	LX.AV 30J.05 4	AS5051AW XMi MCENL6 UMAC 1*512/100/ BT/6L/ 5R_bg_VP _0.3C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	BT VoIP PCMC IA
AS505 1AWX Mi	EMEA	Russia	LX.AV 305.04 3	AS5051AW XMi XPHRU2 UMAC 1*512/100/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Sweden/ Finland	LX.AV 30J.05 5	AS5051AW XMi MCESV5 UMAC 1*512/100/ BT/6L/ 5R_bg_VP _0.3C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	BT VoIP PCMC IA
AS505 1AWX Mi	EMEA	Slovenia/ Croatia	LX.AV 30J.05 3	AS5051AW XMi MCESI1 UMAC 1*512/100/ BT/6L/ 5R_bg_VP _0.3C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	BT VoIP PCMC IA
AS505 2NWX Mi	AAP	Thailand	LX.AV 30C.0 19	AS5052N WXMi LINPUSTH 2 UMAC 1*512/120/ BT/6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	N
AS505 3WXM i	AAP	Thailand	LX.AV 30J.05 6	AS5053WX Mi MCETH1 UMAC 1*1G/120/ BT/6L/5R/ CB_bg_0.3 C_AN	ATTL5 2	N14.1 WXGA G	SO1G BII6	N	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	N
AS505 1ANW XMi	EMEA	Middle East	LX.AV 30C.0 22	AS5051AN WXMI LINPUSAR 9 UMAC 1*512/60/ BT/6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	N
AS505 1ANW XMi	EMEA	Middle East	LX.AV 30C.0 24	AS5051AN WXMi LINPUSAR 9 UMAC 1*512/60/ BT/6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	N

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1ANW XMi	EMEA	Middle East	LX.AV 30C.0 20	AS5051AN WXMi LINPUSAR 7 UMAC 1*512/60/ BT/6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	N
AS505 1ANW XMi	EMEA	France	LX.AV 30C.0 21	AS5051AN WXMi LINPUSFR A UMAC 1*512/60/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1ANW XMi	EMEA	Russia	LX.AV 30C.0 23	AS5051AN WXMi LINPUSRU 5 UMAC 1*512/60/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Middle East	LX.AV 305.04 4	AS5051AW XMi XPHAR8 UMAC 1*512/60/ BT/6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	N
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 30J.05 7	AS5051AW XMi MCEPL7 UMAC 1*512/100/ BT/6L/ 5R_bg_VP _0.3C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	BT VoIP PCMC IA
AS505 1AWX Mi	EMEA	Russia	LX.AV 305.04 5	AS5051AW XMi XPHRU1 UMAC 1*512/100/ BT/6L/ 5R_bg_VP _0.3C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	N	N100 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	BT VoIP PCMC IA
AS505 2WXM i	TWN	GCTWN	LX.AV 30J.05 8	AS5052WX Mi MCETC9 UMAC 1*512/120/ BT/6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	N
AS505 2WXM i	TWN	GCTWN	LX.AV 305.04 6	AS5052WX Mi XPHTC1 UMAC 1*512/120/ BT/6L/5R/ CB_bg_0.3 C_AN	ATTL5	N14.1 WXGA G	SO512 MBII5	N	N120 GB5.4 K	NSM8 X	ABT_ ATH54 13BG	FOX_ BRM_ 2.0	N
AS505 1AWX Mi	EMEA	Switzerland	LX.AV 30J.05 9	AS5051AW XMi MCESW8 UMAC 2*512/120/ BT/6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	FOX_ BRM_ 2.0	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Switzerland	LX.AV 30J.06 0	AS5051AW XMi MCESW8 UMAC 2*512/120/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Portugal	LX.AV 30J.06 1	AS5051AW XMi MCEPT6 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Spain	LX.AV 30J.06 2	AS5051AW XMi MCEESJ UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Germany	LX.AV 30J.06 4	AS5051AW XMi MCEDEA UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Germany	LX.AV 30J.06 5	AS5051AW XMi MCEDEB UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Middle East	LX.AV 30J.07 0	AS5051AW XMi MCEAR1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Middle East	LX.AV 30J.08 4	AS5051AW XMi MCEAR2 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Belgium	LX.AV 30J.06 6	AS5051AW XMi MCEBE6 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 30J.07 9	AS5051AW XMi MCECS5 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Holland	LX.AV 30J.06 9	AS5051AW XMi MCENL6 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Italy	LX.AV 30J.07 1	AS5051AW XMi MCEIT7 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Denmark	LX.AV 30J.07 4	AS5051AW XMi MCEDK6 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	France	LX.AV 30J.06 3	AS5051AW XMi MCEFRF UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Norway	LX.AV 30J.07 3	AS5051AW XMi MCENO5 UMAC 1*512/80/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII6	N	N80G B5.4K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Norway	LX.AV 30J.07 5	AS5051AW XMi MCENO5 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Russia	LX.AV 30J.08 0	AS5051AW XMi MCERU9 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Slovenia/ Croatia	LX.AV 30J.08 5	AS5051AW XMi MCESI1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Switzerland	LX.AV 30J.08 6	AS5051AW XMi MCESW8 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 30J.06 8	AS5051AW XMi MCEPL7 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Sweden/ Finland	LX.AV 30J.06 7	AS5051AW XMi MCESV5 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 30J.08 1	AS5051AW XMi MCEUUK1 1U UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 30J.08 7	AS5051AW XMi MCEUK5 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Turkey	LX.AV 30J.07 2	AS5051AW XMi MCETR5 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Italy	LX.AV 30J.07 6	AS5051AW XMi MCEWIT11 W UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 30J.08 8	AS5051AW XMi MCEUK6 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	France	LX.AV 30J.07 7	AS5051AW XMi MCEWFR1 1W UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Germany	LX.AV 30J.07 8	AS5051AW XMi MCEWDE1 1W UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Germany	LX.AV 305.05 7	AS5051AW XMi XPHDE7 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Middle East	LX.AV 305.06 1	AS5051AW XMi XPHAR1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Denmark	LX.AV 305.04 7	AS5051AW XMi XPHDK1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Belgium	LX.AV 305.05 6	AS5051AW XMi XPHBE1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 305.05 2	AS5051AW XMi XPHCS2 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 30J.08 3	AS5051AW XMi MCEWUK1 1W UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 30J.08 2	AS5051AW XMi MCEWUK2 1W UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 305.05 1	AS5051AW XMi XPHHU6 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Spain	LX.AV 305.05 9	AS5051AW XMi XPHESA UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Greece	LX.AV 305.05 4	AS5051AW XMi XPHEL1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Israel	LX.AV 305.06 9	AS5051AW XMi XPHIS1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	France	LX.AV 305.04 8	AS5051AW XMi XPHFRA UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Italy	LX.AV 305.05 5	AS5051AW XMi XPHIT1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Eastern Europe	LX.AV 305.05 3	AS5051AW XMi XPHPL6 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Holland	LX.AV 305.06 7	AS5051AW XMi XPHNL1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	AAP	Malaysia	LX.AV 305.06 6	AS5051AW XMi XPHMA2 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	N	N
AS505 1AWX Mi	EMEA	Norway	LX.AV 305.05 8	AS5051AW XMi XPHNO1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	South Africa	LX.AV 305.06 2	AS5051AW XMi XPHSA1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 1AWX Mi	EMEA	Russia	LX.AV 305.04 9	AS5051AW XMi XPHRU2 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Sweden/ Finland	LX.AV 305.05 0	AS5051AW XMi XPHSV1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Slovenia/ Croatia	LX.AV 305.06 3	AS5051AW XMi XPHSLO2 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Portugal	LX.AV 305.06 8	AS5051AW XMi XPHPT1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Switzerland	LX.AV 305.06 4	AS5051AW XMi XPHSW5 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	UK	LX.AV 305.06 5	AS5051AW XMi XPHUK1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Turkey	LX.AV 305.07 0	AS5051AW XMi XPHTR1 UMAC 2*512/120/ 6L/ 5R_bg_0.3 C_AN	ATMK 36	N14.1 WXGA	SO512 MBII5	SO512 MBII5	N120 GB5.4 K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1ANW XMi	EMEA	Turkey	LX.AV 30C.0 25	AS5051AN WXMi LINPUSTR 1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ BRM4 318BG	N	N
AS505 1AWX Mi	EMEA	Turkey	LX.AV 305.07 1	AS5051AW XMi XPHTR1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	ATMK 36	N14.1 WXGA G	SO512 MBII5	N	N60G B5.4K	NSM8 X	ABT_ BRM4 318BG	N	N

Model	RO	Country	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wirele ss LAN	Blueto oth	VOIP Phone
AS505 2NWX Mi	AAP	India	LX.AV 30C.0 26	AS5052N WXMi LINPUSIL1 UMAC 1*512/80/ BT/6L/5R/ CB_bg_0.3 C_AN	ATTL5 0	N14.1 WXGA G	SO512 MBII5	N	N80G B5.4K	NSM8 X	ABT_ ATH54 13BG	FOX_ BRM_ 2.0	N

Extensa 5620/5220 Series

Model	RO	Count	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wireless LAN	Bluetoot h
AS305 3WXCi	TWN	GCTW N	S2.AV 205.00 1	AS3053WX CiXPHTC1 UMAC 2*512/60/ BT/6L/ 5R_bg_0.3 C_AN	SMP64342 5W	N14.1W XGA	SO512 MBII5	SO512 MBII5	N60GB5. 4K	NCB2 4X	ABT_AT H5413B G	FOX_BR M_2.0
AS305 4WXCi	TWN	GCTW N	S2.AV 205.00 2	AS3054WX CiXPHTC1 UMAC 2*512/80/ BT/6L/ 5R_bg_0.3 C_AN	SMP64352 5W	N14.1W XGA	SO512 MBII5	SO512 MBII5	N80GB5. 4K	NCB2 4X	ABT_BR M4318B G	FOX_BR M_2.0
AS305 3NWX Mi	AAP	Indone sia	LX.AV 20C.0 03	AS3053N WXMi LINPUSIN1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3NWX Mi	AAP	India	LX.AV 20C.0 02	AS3053N WXMi LINPUSIL1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3NWX Mi	AAP	Singap ore	LX.AV 20C.0 01	AS3053N WXMi LINPUSSG 1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3NWX Mi	AAP	Philipp ines	LX.AV 20C.0 04	AS3053N WXMi LINPUSPH 1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3NWX Mi	AAP	Malay sia	LX.AV 20C.0 05	AS3053N WXMi LINPUSMA 2 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3NWX Mi	AAP	Thaila nd	LX.AV 20C.0 06	AS3053N WXMi LINPUSTH 2 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N

Model	RO	Count ry	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wireless LAN	Bluetoot h
AS305 3NWX Mi	AAP	Vietna m	LX.AV 20C.0 07	AS3053N WXMi LINPUSVN 1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	Z
AS305 3WXM i	PA	USA/ Canad a - Canad ian French	LX.AV 20J.00 1	AS3053WX Mi MCECF UMAC 1*512/100/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N100GB 5.4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	USA/ Canad a - Canad ian French	LX.AV 20J.00 2	AS3053WX Mi MCEUS UMAC 1*512/100/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N100GB 5.4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	ACLA- Spanis h	LX.AV 20J.00 3	AS3053WX Mi MCEES1 UMAC 1*512/100/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N100GB 5.4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	USA/ Canad a	LX.AV 205.00 9	AS3053WX Mi XPHFR1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N80GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	ACLA- Spanis h	LX.AV 205.01 0	AS3053WX Mi XPHES1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N80GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	AAP	Austral ia/New Zealan d	LX.AV 205.00 1	AS3053WX Mi XPHAU1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	AAP	Philipp ines	LX.AV 205.00 2	AS3053WX Mi XPHPH1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	AAP	Malay sia	LX.AV 205.00 3	AS3053WX Mi XPHMA2 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N

Model	RO	Count ry	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wireless LAN	Bluetoot h
AS305 3WXM i	AAP	Indone sia	LX.AV 205.00 5	AS3053WX Mi XPHIN1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	USA/ Canad a	LX.AV 205.00 8	AS3053WX Mi XPHEN1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N80GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	AAP	Vietna m	LX.AV 205.00 7	AS3053WX Mi XPHVN1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	AAP	Thaila nd	LX.AV 205.00 6	AS3053WX Mi XPHTH2 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	AAP	Singap ore	LX.AV 205.00 4	AS3053WX Mi XPHWSG2 1W UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	ACLA- Portug uese	LX.AV 205.01 1	AS3053WX Mi XPHXC1 UMAC 1*512/80/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N80GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3NWX Ci	EMEA	Middle East	LX.AV 20C.0 08	AS3053N WXCi LINPUSAR 9 UMAC 1*512/60/ 6L/ 5R_bg_0.3 C_AN	SMP64342 5W	N14.1W XGA	SO512 MBII5	N	N60GB5. 4K	NCB2 4X	ABT_BR M4318B G	N
AS305 3NWX Mi	EMEA	Middle East	LX.AV 20C.0 09	AS3053N WXMi LINPUSAR 9 UMAC 1*512/60/ BT/6L/ 5R_bg_0.3 C_AN	SMP64342 5W	N14.1W XGA	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	FOX_BR M_2.0
AS305 3WXCi	EMEA	France	LX.AV 205.01 2	AS3053WX Ci XPHFRA UMAC 1*512/60/ 6L/ 5R_bg_0.3 C_AN	SMP64342 5W	N14.1W XGA	SO512 MBII5	N	N60GB5. 4K	NCB2 4X	ABT_BR M4318B G	N

Model	RO	Count ry	Acer Part no	Descriptio n	CPU	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wireless LAN	Bluetoot h
AS305 3WXCi	EMEA	Middle East	LX.AV 205.01 4	AS3053WX Ci XPHAR8 UMAC 1*512/60/ 6L/ 5R_bg_0.3 C_AN	SMP64342 5W	N14.1W XGA	SO512 MBII5	N	N60GB5. 4K	NCB2 4X	ABT_BR M4318B G	N
AS305 3WXM i	EMEA	Middle East	LX.AV 205.01 3	AS3053WX Mi XPHAR8 UMAC 1*512/60/ BT/6L/ 5R_bg_0.3 C_AN	SMP64342 5W	N14.1W XGA	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	FOX_BR M_2.0
AS305 3WXM i	PA	USA/ Canad a - Canad ian French	LX.AV 20J.00 5	AS3053WX Mi MCECF UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	USA/ Canad a - Canad ian French	LX.AV 20J.00 6	AS3053WX Mi MCEUS UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	Z
AS305 3WXM i	PA	ACLA- Spanis h	LX.AV 20J.00 7	AS3053WX Mi MCEES1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	Z
AS305 3WXM i	PA	USA/ Canad a	LX.AV 206.00 4	AS3053WX Mi XPPEN1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	USA/ Canad a	LX.AV 206.00 3	AS3053WX Mi XPPFR1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	ACLA- Spanis h	LX.AV 206.00 1	AS3053WX Mi XPPES1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	PA	ACLA- Portug uese	LX.AV 206.00 2	AS3053WX Mi XPPXC1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N

Model	RO	Count	Acer Part no	Descriptio n	СРИ	LCD	DIMM 1	DIMM 2	HDD 1 (GB)	ODD	Wireless LAN	Bluetoot h
AS305 3WXM i	PA	ACLA- Portug uese	LX.AV 205.01 5	AS3053WX Mi XPHXC1 UMAC 1*512/60/ 6L/5R/ CB_bg_0.3 C_AN	SMP64342 5W	N14.1W XGAG	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3NWX Mi	EMEA	Turkey	LX.AV 20C.0 10	AS3053N WXMi LINPUSTR 1 UMAC 1*512/60/ 6L/ 5R_bg_0.3 C_AN	SMP64342 5W	N14.1W XGA	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N
AS305 3WXM i	EMEA	Turkey	LX.AV 205.01 6	AS3053WX Mi XPHTR1 UMAC 1*512/60/ 6L/ 5R_bg_0.3 C_AN	SMP64342 5W	N14.1W XGA	SO512 MBII5	N	N60GB5. 4K	NSM8 X	ABT_BR M4318B G	N

Test Compatible Components

This computer's compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested under Windows® XP Home, Windows® XP Pro environment.

Refer to the following lists for components, adapter cards, and peripherals which have passed these tests. Regarding configuration, combination and test procedures, please refer to the TravelMate 5710/5310 and Extensa 5610/5210 series Compatibility Test Report released by the Acer Mobile System Testing Department.

Microsoft® Windows® Vista Environment Test

Item	Specification
CRT Port Test	
CRT Monitor	Acer 211c 21", ViewSonic G220F, ViewSonic PF790 19"
LCD Monitor	Acer FP751 17" TFT LCD, Acer AL1521, Acer AL1721, ViewSonic VD201b, Westinghouse W37G, HP LP2065, HP S9500
Projector	Dell 3300MP
USB Port Test	
USB Keyboard/Mouse	Microsoft Natural Keyboard Pro
COD Reyboara/Wodoc	Dell USB Keyboard
	Logicool USB Mouse (OWCM-USB)
	Logitech USB Wheel Mouse
	Logitech First Wheel Mouse
	Dell Dell by Logitech
	Dell Internet Navigator Keyboard
	Dell Smart Card Keyboard
	HP USB Optical Austin Mouse
	Belkin Miniglow Optical USB Mouse
	HP USB Optical Mouse (RB129AA)
USB Speaker/Joystick	Aiwa Multimedia Digital Speaker (SC-UC78)
	Panasonic USB Speaker EAB-MPC57USB
USB Storage Drive	Iomega USB Zip 250MB
	Transcend 80G HDD
	Plextor DVD+R/RW
	LG DVD+R/RW
	Sony DVD+R/RW
USB Camera	Intel Easy PC Camera (A20953-001)
	Orange Micro USB 2.0 Web Cam
USB HUB and Others	A TEN UH-204
	IOGEAR 4-Port Hub
	Corega CG-WLUSBST11
USB Printer/Scanner	HP 450WBT Deskjet Printer
USB Flash Drive	Sony Memory Key 128MB
	Sony Micro Vault Pro USD-5G
	IBM 128MB Memory Key
	IBM 512MB Memory Key
	Apacer Handy Drive
	Apacer The USB Flash Drive 256MB
USB ODD	Logitec CDRW+DVDROM combo
	LG DVD+R/RW
	Sony DVD+R/RW
1394 Camera	Sony DV-TRV10
Access Point 802.11a	Intel Pro/Wireless 5000
	NetGear HE 102
Access Point 802.11g	D-Link Building Networks People WiFi Certified a/b/g Wireless 108AG
Access Point 802.11n	Belkin N1MIMO Wireless Router High Performance wireless 802.11n
Bluetooth Device	Sony Ericsson Wireless Headset
	Sony Ericsson T610
	X Bridge Bluetooth Access Point BT300
•	•

Item	Specification
PCMCIA Test	
LAN/Modem Card	TDK CardBus Ethernet 10/100 32-Bit CBE-10/100BTX
Storage Card	Hitachi Microdrive 4G
1394 Card	Buffalo 1394 Interface Cardbus (IFC-ILCB/DV)
USB2.0 Card	IBM EtherJet CardBus Adapter 10/100
Wireless Lan Card	Cisco Wireless LAN Card 802.11a
(Not recommended for wireless ready model)	NETGEAR Wireless LAN card 802.11a
ISDN Card	Toshiba Type B for Bluetooth 128K ISDN Card
GPRS Card	Vodafone QL1ACC-21581 3G/GPRS card
	Sony Ericsson GC83 GPRS card
	Sony Ericsson GC89 GPRS card
ExpressCard Test	•
Express Card	Abcom 5-in-1 Adapter ExpressCard Reader
	Abcom GigaLan ExpressCard
	Sunix ECF2400 2 Ports 1394A ExpressCard
Memory Card Test (SD/MS/MMC/SM/C	F/Microdrive/XD)
SD Card	Apacer 128/256MB
	SanDisk 256MB
	Apacer 2GB (150x Hi-Speed)
	KINGMAX 1GB (66x Hi-Speed)
	SanDisk 1GB
	RiDATA 4GB SD PRO Memory Card
MS Card	Sony 512 MS PRO
	Lexar 512MB MS PRO
	Lexar 1GB MS PRO
	Sony 2GB MS PRO
MMC Card	SanDisk 32MB
	Transcend 64/128MB
	Transcend 256MB
	SanDisk RS-MMC 128MB
	PQI RS-MMC 256MB
	Transcend 512MB
	A-DATA Turbo 200X 2GB MMC Card
XD Card	Apacer 256/512MB
	SanDisk 2GB
	Olympus 512MB
CF Card	Apacer 256/512
	SanDisk 2GB

Online Support Information

This section describes online technical support services available to help you repair your Acer Systems.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer Branch Offices and Regional Business Units may access our website. However some information sources will require a user i.d. and password. These can be obtained directly from Acer CSD Taiwan.

Acer's Website offers you convenient and valuable support resources whenever you need them.

In the Technical Information section you can download information on all of Acer's Notebook, Desktop and Server models including:

		Service guides for all models
		User's manuals
		Training materials
		Bios updates
		Software utilities
		Spare parts lists
		TABs (Technical Announcement Bulletin)
		ourposes, we have included an Acrobat File to facilitate the problem-free downloading of our naterial.
Also	conta	ined on this website are:
		Detailed information on Acer's International Traveler's Warranty (ITW)
		Returned material authorization procedures
		An overview of all the support services we offer, accompanied by a list of telephone, fax and emai contacts for all your technical queries.

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.

Appendix C 167

168 Appendix C

Α		Ε	
	AFLASH Utility 51		Error Symptom-to-Spare Part Index 106
	Antennas 98		Euro 16
	Audio 34		External CD-ROM Drive Check 102
В			External Module Disassembly Flowchart 59
	Battery Pack 60	F	
	BIOS 29	_	
	package 29		Features 1
	password control 29 ROM size 29		Flash Utility 51
	ROM type 29		fpc cable 96
	vendor 29 Version 29		FRU (Field Replaceable Unit) List 125
	BIOS Supports protocol 29	Н	
	BIOS Utility 39–51		Hard disk 32
	Navigating 40		Hard Disk Drive Module 65
	Onboard Device Configuration 46 Security 43, 45		HDD 32
	System Security 50		Heatsink Module 70
	Board Layout		Hibernation mode
	Top View 121		hotkey 15
	brightness		Hot Keys 13
	hotkeys 15	I	
C			Indicators 9
	Cache		Intermittent Problems 119
	controller 30		internal mic and web camera 99
	size 30		inverter board 96
	caps lock on indicator 9		involter beard ye
	CardBus 35	J	
	computer		Jumper and Connector Locations 121
	on indicator 9		Top View 121
	CPU 73	K	
	CPU Fan True Value Table 29		Keyboard 36, 76
D			Keyboard or Auxiliary Input Device Check
	DUMAN 11 62		102
	DIMM Module 63		
	Display 4	_	
	display hotkeys 15		Launch Board 84
	HOINEYS 13		LCD Bezel 94

Index 169

	LCD Brackets 97		System
	LCD Module Disassembly		Block Diagram 4
	Flowchart 93		System Check Procedures 102
	LCD with the Brackets 95		System Memory 30
	lower cover 62		System Utilities 39
M		Т	
	Main Unit Disassembly		Test Compatible Components 163
	Flowchart 69		Top 121
	Mainboard 88		Touch Pad Board 85
	media access		touchpad
	on indicator 9		hotkey 15
	Memory Check 103		Touchpad Check 105
	Middle Cover and Power Board 74		Troubleshooting 101
	Model Definition 136	U	
	Modem Board 70		
Ν			Undetermined Problems 120
	Note head, Manager		USB Board 91
	Notebook Manager hotkey 15		utility
	num lock		BIOS 39-51
	on indicator 9	V	
0			Video 35
	Online Support Information 167	W	
	optical drive module 66		Windows 2000 Environment Test 164
Р			WLAN Board 64
	Panel 5		
	Bottom 8 left 5		
	PC Card 9, 35		
	PCMCIA 35		
	Power System Check 103		
	Battery Pack 105 Power Adapter 104		
	Processor 29		
S			
	Screw List 58, 59, 69, 93		
	Speaker Module 90		
	speakers		
	hotkey 15		

170 Index